

1-1-1979

Rollins College General Catalogue, 1979-1981

Rollins College

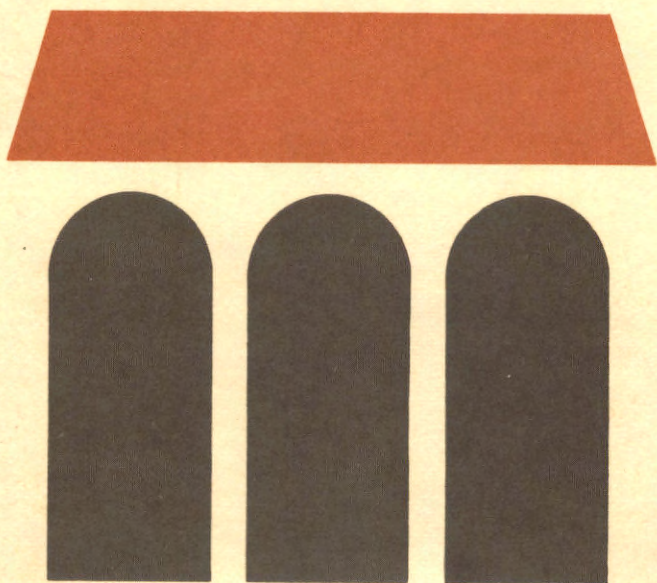
Find similar works at: <https://stars.library.ucf.edu/cfm-texts>
University of Central Florida Libraries <http://library.ucf.edu>

Recommended Citation

Rollins College, "Rollins College General Catalogue, 1979-1981" (1979). *Texts of Central Florida*. 833.
<https://stars.library.ucf.edu/cfm-texts/833>

This Catalog is
brought to you for
free and open
access by the
Central Florida
Memory at STARS.
It has been
accepted for
inclusion in Texts of
Central Florida by an
authorized
administrator of
STARS. For more
information, please
contact
lee.dotson@ucf.edu.





ROLLINS COLLEGE

Winter Park, Florida

General Catalogue

1979-81

Rollins College

Rollins College Bulletin, Winter Park, Florida



GENERAL CATALOGUE 1979-1981

This General Catalogue is the official academic information Bulletin of Rollins College, Winter Park, Florida 32789 effective 1979-1981.

ROLLINS COLLEGE CATALOGUE Volume LXXII, 1979.

Table of Contents

Introduction	1
Admissions	4
Tuition and Remission Policies	5
Refund Policy	6
Student Aid	7
Undergraduate Curriculum	8
General Education Requirements and Regulations	8
Anthropology-Sociology	20
Art	28
Biology	33
Chemistry	37
Speech / Communications	41
Economics and Business Administration	44
Education	49
English	55
Environmental Studies	58
Experimental Courses	62
Foreign Languages	62
Geology and Geography	67
History	68
Mathematical Sciences	72
Music	77
Philosophy and Religion	82
Physical Education	89
Physics	90
Political Science	93
Pre-Engineering	99
Pre-Forestry	99
Pre-Law	100
Pre-Medicine	101
Psychology	102
Reserve Officer Training Program	105
Science	106
Theatre Arts	107
Trustees	111
Officers of the Administration	112
Faculty Emeriti	113
Faculty	114
Calendar	124

Introduction to the College

THE COLLEGE IN BRIEF

Rollins College was founded in 1885 and is the oldest institution of higher education in Florida. Established under the auspices of the Congregational Church, Rollins today is non-denominational and independently supported by income from tuition, investments and contributions from friends and alumni.

A pioneer in co-education in the southeastern United States, Rollins offers a four-year liberal arts program to approximately 1350 men and women undergraduates from most states of the Union and many foreign countries. As the objectives of the College are not directed solely toward today's young people, but extend to all persons who wish to enrich their lives through higher education, Rollins provides undergraduate continuing education programs on the main campus and a branch at Patrick Air Force Base, as well as community courses in creative arts for children and adults. In addition, Rollins offers graduate programs in education, business and criminal justice.

The College is located in Winter Park, a lovely residential community adjacent to the city of Orlando. Fifty miles from the Atlantic Ocean and seventy miles from the Gulf of Mexico, Orlando is in the heart of an increasingly expanding industrial and agricultural area. A traditional Spanish-Mediterranean architecture characterizes the buildings on the beautifully landscaped sixty-five acre campus, which is bounded by Lake Virginia to the east and south.

ACCREDITATION

Rollins College is an accredited member of the Southern Association of Colleges and Schools, a full member of the National Association of Schools of Music and has been placed on the list of institutions approved by the American Chemical Society.

Rollins is also a member of the Association of American Colleges, the American Council on Education, the Florida Association of Colleges and Universities, the College Entrance Examination Board, the American Association of University Women, and the American Association of Colleges for Teacher Education.

PURPOSE

Rollins College stands among the small, coeducational, independent liberal arts institutions which distinctively contribute to the vitality and diversity of American higher education. The purpose of Rollins is to offer a liberal education rather than a wide diversification in specialized training.

At Rollins, we believe the College fulfills its purpose when the encounter of the person with the world is kept at the center of the College's concern. So that the students may comprehend and fulfill their task in shaping the future, Rollins seeks to broaden their understanding of influences that have shaped the present and to develop intellectual competence, personal effectiveness, and methods by which knowledge can be discovered and applied. Through studies in both the arts and

sciences, the College intends to challenge and inspire the student to think with precision and imagination. Further, the student learns to recognize how various disciplines, both independently and together, arrive at and evaluate answers to significant questions. The student is encouraged to develop perspectives for understanding the present and for coping with problems yet unknown.

Realizing that intellectual capacities are best developed through the interaction of people and ideas, Rollins seeks to establish a community of learning in which instructors and students are colleagues in educational endeavor. Within this setting the College hopes to enlarge the students' awareness of their capabilities and limitations, stimulate their alertness to contemporary issues and events, deepen their sensitivity to beauty, and contribute to their physical well-being. This environment provides opportunity for students, faculty, and administrators to discover and accept responsibilities of membership in a learning community. Rollins fosters the free exploration of the contemplative and creative adventures of the mind, and encourages the students' openness to the ideas of others and the development of their confidence in articulating their own views with the integrity that the search for truth demands.

Through the total educational programs of the College we wish to stimulate each other toward the development of personal values and commitments. We want the members of the College's community to appreciate the values of various cultures and institutions and, as responsible participants, to identify and correct deficiencies in social structures.

Our central goal at Rollins is the development of the intellectual maturity desired by persons not simply seeking for ways to get along, but for ways to realize more of the human potential.

HERITAGE

The College has enjoyed a succession of dedicated and able presidents. Edward Payson Hooker (1885-1892), George Morgan Ward (1896-1902), William Fremont Blackman (1902-1915), Hamilton Holt (1925-1949), Hugh F. McKean (1951-1969), and Jack B. Critchfield (1969-1978), all contributed to the advancement of high standards of scholarship, close student-teacher relationships, and innovation in education.

During the administration of Dr. Hamilton Holt, Rollins College established the Conference Plan, which emphasized close teacher-student contact. Under this plan, teachers and students evoked oral and written expression from each other, an activity which led the student to develop clear standards by which he or she could judge his or her own work. The College retains this method but not to the exclusion of other significant approaches to teaching. Dr. Holt, through his experimental approaches to higher education, brought national renown and distinction to Rollins College.

During the administration of Dr. Hugh F. McKean, the College developed the Honors Degree Program for exceptionally well prepared and qualified students. Graduate programs were established in education and business, as were the School for Continuing Education, located in Winter Park, and a separate branch of the College at Patrick Air Force Base, which together provide evening education programs for nearly 2,500 adults. Although President McKean was a student and professor of art, it was during his administration that significant advances and general strengthening of the College programs in business administration, economics, and the sciences occurred. First building a strong faculty, he then secured two outstanding facilities for the College: The Roy E. Crummer School of Finance and Business Administration and the Archibald Granville Bush Science Center. Other facilities added during the McKean administration included the Charles A. DuBois Health Center, the Enyart-Alumni Field House, and three major student residence halls.

Dr. Jack B. Critchfield was elected President of Rollins College in 1969. Under his leadership the College moved in new directions by establishing programs in environmental and interdisciplinary studies and graduate and undergraduate programs in criminal justice. Continuing to build a strong faculty, and seeking those students who would most profit by the personalized education provided at Rollins College, Dr. Critchfield generated new support from all facets of the community for the College. New facilities added during the Critchfield presidency include an addition to the Knowles Memorial Chapel; the Alfond Swimming Pool complex; Frederick A. Hauck Hall, housing the language department; R. D. Keene Hall, housing the music department; the U. T. Bradley Memorial Crew Boat House; the George D. and Harriet W. Cornell Fine Arts Center; and a physical plant building.

The current President, Dr. Thaddeus Seymour, was elected to office in 1978, having served previously as Dean of Dartmouth College and President of Wabash College in Indiana. As Rollins looks to its Centennial in 1985, Dr. Seymour has defined clearly the goal of quality liberal arts education in a personal and caring environment: "On November 4, 1985, our aim is to know ourselves and to be known by others as the finest small college in the Southeast, standing among the finest small colleges in the country."

ADMISSIONS, EXPENSES, FINANCIAL AID

ADMISSION FROM SECONDARY SCHOOLS

Secondary school seniors recommended by their schools are eligible for consideration upon receipt of a formal application with the \$25 application fee, secondary school record, and results of either the Scholastic Aptitude Test (SAT) of the College Entrance Examination Board (CEEB) or the Examination by the American College Testing Program (ACT). All applicants for admission must take one of these examinations, preferably in the fall of the senior year. Students whose native language is not English must submit results of the Test of English as a Foreign Language (TOEFL). Registration may be obtained by writing to the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540 or the American College Testing Program, Box 451, Iowa City 52240.

EARLY ADMISSION

Unusually well qualified applicants, who are strongly recommended, may be considered for entrance prior to secondary school graduation, usually for entrance following their junior year. An on-campus interview is required of all Early Admission candidates.

EARLY DECISION

Superior students, with the approval of their secondary school, may submit their junior year record and junior results of the Scholastic Aptitude Test or ACT with the request that the Admissions Committee grant an *Early Decision* based on the assumption that the senior year performance will be similar in quality to that of the first three years of secondary school. Applicants for Early Decision agree not to apply elsewhere unless their application is deferred, and should apply only if Rollins is their first choice. Early Decision applications must be received by November 15 and candidates will be notified by December 1 of their senior year. A non-refundable reservation fee of \$250 is due and payable upon notification of acceptance.

If the Early Decision candidate is not granted admission, the application will be reconsidered after January 1 when regular applications are reviewed.

ADMISSION WITH ADVANCED STANDING

Entering freshmen who pass Advanced Placement Examinations given by the College Entrance Examination Board in May will, with the approval of the Academic Standards Committee and the department concerned, be eligible for admission to advanced courses in the department. Students may use these tests to meet, in advance, certain distribution requirements for graduation. Upon recommendation of the department concerned, tests may be used to reduce the number of credit hours re-

quired for the Rollins degree. Information about these tests may be obtained from the CEEB.

In addition, entering students may obtain course credit by scoring 550 or better on the CEEB's College Level Examination Program (CLEP). Credit will only be awarded for work on the General Examinations which include Humanities, Social Science, Natural Science, Mathematics, and English Composition. Students who pass all or part of this battery of examinations may receive up to forty quarter hours of college credit.

ADMISSION FROM OTHER COLLEGES

Transfer admission from other colleges is equally competitive. It will be necessary to have forwarded an official transcript from each college attended, as well as high school transcripts.

Generally, a transfer student should have some college-level background in the humanities, the social sciences, the natural sciences including laboratory work, mathematics, and English composition. To receive information regarding the evaluation of transfer credits the applicant must first apply for admission and pay the application fee. The applicant must be in good academic standing and eligible to return to the institution from which transfer is proposed. Transfer students must meet all of the Rollins requirements if they intend to graduate from Rollins. In the evaluation of transfer credit, $3\frac{1}{2}$ semester hours or 5 quarter hours are equated to one Rollins course.

For more information write:

Ms. Cynthia Grubbs,
Director of Admissions
Rollins College
Winter Park, Florida 32789

STUDENT EXPENSES

The cost of educating a student is more than the fees charged. The difference comes from gifts and income from endowment. Tuition and fees are subject to change by action of the Board of Trustees.

The Rollins College Comprehensive fee for the 1979-80 academic year is \$5,790 which includes tuition, room, board and fees. Campus Faire is the resident dining program offered at Rollins College. Each student has an account balance, which is regulated by a ValiDine Card. Similar to a credit card system, a student will be charged only for the food selected. The price of each meal is totaled and electronically subtracted with the remaining balance displayed on the cash register. If a card is lost, the card number can be voided and a new number assigned for a nominal fee. Tuition is \$3,800 and fees are \$190.

Book costs are estimated at approximately \$200 per year. Personal expenses range from \$50 to \$75 per month.

After payment of the reservation fee on May 1 for new students, the balance is payable in two installments. By July 18, 55% minus the reservation fee, will be due, and the balance of 45% is due on or before December 19.

Deferred monthly payment plans are available with the Tuition Plan, Inc., Concord, N.H. 03301. Further information is available on request from the Cashier's office.

Application Processing Fee	\$ 25.00
(Payable with submission of Application for Admission and is non-refundable)	
Reservation Fee	
Boarding Students	250.00
Day Students	100.00
(Payable by May 1 for incoming students; payable by April 15 for returning students, and is non-refundable.)	

SCHEDULE OF FEES 1979-80 ACADEMIC YEAR

	Fall and Winter Term	Spring Term	Total
Boarding Students			
Tuition	\$2090	\$1710	\$3800
Room	522	428	950
Board Plan	468	382	850
Required Fees*	104	86	190
Total	3184	2606	5790
Day Students			
Tuition	\$2090	\$1710	\$3800
Required Fees*	104	86	190
Total	2194	1796	3990

*Required fees include General Fees, Student Association Fees and College Health Service Fees for service of DuBois Health Center and hospitalization and major medical insurance for which the amount of \$80 is deductible for tax purposes.

Physical Education courses do not have a fee except in the following: Bowling, Horseback Riding, Water Skiing or Scuba. If applicable, the fee must be paid at the time of registration.

REFUND POLICY

Fall/Winter Term

Students who notify the College before July 18, 1980, that they will not attend school in the Fall, will have all Fall/Winter term fees paid prior to that date refunded except for the reservation deposit which is not refundable.

After July 18, 1980, the following refund policies will apply:

Tuition: We will refund \$807 if the student formally withdraws before October 5, 1980.

Room: No refund will be made.

Board: We will refund 100 percent of the unused board account if the student withdraws before October 5, 1980 and 40 percent of the unused balance thereafter.

Fees: Student fees will not be refunded. Students and parents are reminded, however, that the health insurance policy will remain in effect until the end of the term in which withdrawal occurs.

Students who complete their degree requirements at the end of the Fall term will be refunded \$380 tuition and \$95 room (\$110 for a single). We will refund \$85 for Winter term board, provided there is at least that amount in the board account and 40 percent of any balance in the account in excess of \$85.

Spring Term

If a student withdraws from the Spring term after December 19, 1980 and before February 9, 1981, we will refund all tuition which has been paid and the unused balance in the board account. No room refund will be made.

After February 9, 1981, the following refund policy will apply:

Tuition: We will refund \$427 if the student formally withdraws before March 9, 1981.

Room: No refund will be made.

Board: We will refund 100 percent of the unused board account if the student withdraws before March 9, 1980 and 40 percent of the unused balance thereafter.

Fees: Student fees will not be refunded.

Notice of withdrawal should be made to the Office of the Vice Provost. Students will not be given transcripts or be allowed to graduate until all bills are paid.

A student who is obliged to leave College during the academic year because of serious accident or major medical or surgical illness necessitating two or more weeks' hospitalization may be eligible for a refund. Withdrawal for this reason must be recommended by the College physician. In this particular situation, the College will refund tuition on a pro rata basis from the date of the disability. Room charges and fees will not be refunded. We will refund 100 percent of the unused board account.

Students will not be given credit for work done, will not receive honorable dismissal or obtain transcripts of credit, or be permitted to graduate until all college bills are paid.

An appropriate adjustment will be made to take into account financial aid awards, Central Florida Tuition Remission, etc.

Our policy will be to distribute the refund to each of the elements of the financial aid or remission package in the same proportion as each element bears to the total settlement of charges for each term.

STUDENT AID AT ROLLINS COLLEGE

The objective of Student Aid at Rollins College is to assist qualified students in attending school, regardless of the family's ability to meet the cost of education. While a limited number of awards based solely on merit are available, most aid awards at Rollins are based on proven financial need and the academic record of the student. Funds are provided by the College as well as Federal and State sources. Student Aid consists of scholarships and grants, loans and employment opportunity. Most students receiving aid have a "package" consisting of two or three of these forms of aid. To apply for aid, a student must file an application for admission, and a copy of the Financial Aid Form of the College Scholarship Service.

For further information write to:

Director of Student Aid, Box 2721

Rollins College

Winter Park, Florida 32789

or call

(305) 646-2395

Undergraduate Curriculum

REQUIREMENTS FOR GRADUATION

To be eligible for the Bachelor of Arts degree, the following general requirements are stipulated:

RESIDENCE REQUIREMENTS

A student, after entering the Rollins day program as a full-time degree-seeking student, must complete at least three-fourths of the remaining program of study leading to the Bachelor of Arts degree in the Rollins day program and other programs specifically approved by the Provost. Moreover, in his/her senior year (i.e. the last nine courses leading to the Bachelor's degree) the student must be enrolled on a full-time basis in the Rollins day program.

GRADE REQUIREMENT

The student must have a minimum academic average of 6.00 (C) for all courses taken at Rollins. For an explanation of grades and scholastic requirements, see below.

CREDIT REQUIREMENT

The student must complete 36 courses of academic work (180 quarter hours).

GENERAL EDUCATION REQUIREMENTS

The student must complete the General Education Requirements listed below. These requirements are divided into three main areas: Skills, Cognitive Courses, and Affective Courses. The courses which meet each of these requirements are appropriately designated in the Rollins College Schedule.

I. SKILLS.

The purpose of this requirement is to provide students with the opportunity to acquire the skills necessary for success in education and in coping with the modern world. Each student must take 2 to 6 skill requirements. It is expected that these skill requirements will be completed by the end of the second year.

A. Written Communication:

The objective of this requirement is to improve the student's ability to write effectively. The requirement is based on the propositions that the written use of words for purposes of communication is an acquired skill and that the value of acquiring correct and effective writing skills lie in man's fundamental need to solve problems of expression.

Courses meeting this requirement should include instruction in basic compositional skills. A separate content course will reinforce these skills by emphasizing English composition as a part of its requirement.

The English composition requirement may be fulfilled by a score of 600 or more on the College Entrance Examination Board (CEEB) achievement test in English composition or by taking E 101. All students must take a composition reinforcement course.

B. Foreign Language Communication:

The objective of this requirement is to provide the students with the opportunity to communicate effectively in a language other than their own. This requirement will also lead to an acquaintance with, and appreciation of a foreign culture and will supplement objectives stated in the Knowledge of Other Cultures requirement.

The foreign language requirement may be fulfilled in one of three ways: successful completion of two years of a language at the high school level; a score of 550 on the foreign language achievement test of the CEEB; completion of a 102 course in a foreign language.

C. Decision Making and Valuation:

The objective of this requirement is to improve the student's ability to make rational value judgments and especially judgments involving conflicts between moral, aesthetic, intellectual, monetary and pragmatic values. (This requirement will not be implemented for the 1979/80 academic year, and therefore, will not be required of those students entering as freshmen or transfer students during that year.)

D. Quantitative Reasoning:

The objective of this requirement is to improve the student's ability to use mathematical and/or logical symbols, to approach problems methodically, and to construct logical solutions.

Courses meeting this requirement include instruction involving skills that use and reason with mathematical and/or logical symbols.

The quantitative requirement may be fulfilled by a score of 600 on the Scholastic Aptitude Test (S.A.T.) of the CEEB or by taking a quantitative course.

II. COGNITIVE AREA.

The purpose of this requirement is to provide students with the opportunity to acquire an understanding and comprehension of specific areas of knowledge essential to a liberal education and to become familiar with the methods of inquiry in each of these areas.

In the cognitive section, at least one course must be taken in each field. No course in the student's major department may be used to satisfy this requirement.

A. Development of Western Society and Culture:

The objective of this requirement is to provide students with an understanding of the nature of past Western societies, their institutions and their ideas. By studying these older cultures from an historical perspective, students will acquire a deeper understanding of their own society.

Courses meeting this requirement include instruction which provides students with an understanding of the institutions and ideas of Western tradition and with a sense of historical development in this tradition.

B. Knowledge of Other Cultures:

The objective of this requirement is to provide students with an awareness of the different beliefs, customs, institutions, and modes of expression of societies or ethnic groups other than their own. By studying these cultures, students will be better able to understand modern world problems and to cope with them.

Courses meeting this requirement include instruction in the beliefs, customs, institutions and modes of expression of non-Western or Third World societies or ethnic groups, as well as those of Western cultures when studied in a foreign language.

C. Knowledge of Contemporary American Society:

The objective of this requirement is to provide an understanding and comprehension of contemporary American political, social, and economic systems and institutions. By studying these systems, students should be better able to understand their present forms and to evaluate the desirability of their future development.

Courses meeting this requirement include instruction in the nature of American society's present political, social, and economic systems and institutions.

D. The Natural World:

The objective of this requirement is to provide students with some knowledge of the natural world in which they live and to improve the student's understanding of the methods of inquiry which are common to natural science.

Courses meeting this requirement include instruction in the scientific method as employed by the natural sciences and shall include laboratory experience.

III. AFFECTIVE AREA.

The purpose of this requirement is to provide students with the opportunity to find meaning in that aspect of human nature characterized by emotions, imagination, and personal relationships. Such objectives can be realized in part through the study of expressive arts and literature. In the Affective section, at least one course must be taken in each field. No course in the student's major department may be used to satisfy this requirement.

A. Awareness and Understanding of Expressive Arts:

The objective of this requirement is to provide students with an awareness of how the expressive arts imaginatively reflect in visual signs, dramatic forms, or intelligible tones, the conditions and experiences of human life and human nature.

Courses meeting this requirement include instruction which emphasizes human nature as characterized by the emotions, imagination, and personal relationships. They should also include instruction in the process by which people create and should deal with the characteristics of their inspiration.

B. Awareness and Understanding of Literature:

The objective of this requirement is to provide students with an awareness of how literature imaginatively reflects in words the conditions and experiences of human life and human nature.

Literature courses meeting this requirement include instruction in the nature and progress of people's interests, attitudes, appreciations and values.

MAJOR REQUIREMENTS

Students must satisfactorily complete the courses required by the major department or the courses in the plan of study of an Area Major. The number of courses required by departments may vary between 10 and 16.

No more than 16 courses taken within a student's major department can count toward the graduation requirement of 36 courses. In any combined major, no more than 18 courses taken within the student's two departments can count toward the graduation requirement of 36 courses. If a student elects to take more than these upper limits, the additional courses will be listed on the transcript and will be included in the cumulative average, but will not be counted toward the graduation requirement of 36 courses. In a case in which a student requires more than the maximum

number of courses in a major department for certification purposes, an exception to this regulation can be made upon recommendation of the department head to the Office of the Provost. This regulation applies not only to courses taken in the Rollins day program, but also to courses taken at any other institution or in the Rollins College School of Continuing Education.

PHYSICAL EDUCATION

Four terms of physical education (fall and spring) are required for all students who enter as freshmen unless excused for medical reasons. The requirement for transfer students is determined by their class standing. A satisfactory grade must be received. This requirement should be satisfied by the end of the fall term of the junior year. In addition, all freshmen and transfer students must take the Rollins College swimming test at the beginning of the fall or spring term. Students who fail the test will be assigned to a swimming class until they can pass the test.

SENIOR EXAMINATION

Some departments require students to take the Field Test of the Undergraduate Program for Counseling and Evaluation, or the Advanced Test of the Graduate Record Examination applicable to the major department for graduation. Majors in the following departments are required to take tests: Art History, Biology, Business Administration, Chemistry, Economics, Elementary Education, Foreign Language, Music and Physics.

COMMENCEMENT

Graduating seniors are expected to participate in the annual Commencement unless excused for a valid reason by the Vice Provost.

HONORS PROGRAMS

Rollins College offers three distinct honors programs each of which satisfies the needs of a particular category of students.

I. THE HONORS DEGREE PROGRAM

This program allows academically superior students who satisfy stringent admissions criteria to enter at full sophomore status, to be excused from a number of general education requirements and from one year of physical education, and so enables them to graduate in three years with a special Honors Bachelor of Arts degree.

Students who are interested in this program and satisfy the following criteria may apply for admission:

1. Combined verbal and mathematics S.A.T. score of 1300 or above;
2. CEEB English Achievement score of 600 or above;
3. Three years of mathematics;
4. Two years of laboratory science.

The Honors Degree Supervisory Board, on receiving an application for admission, determines the applicant's eligibility to enter the program on the basis of the high

school record and teacher recommendations. All applicants are required to be interviewed by College representatives either at the student's high school or on the college campus.

The program has its own graduation requirements, a distinctive curriculum, and special academic advisors. Successful candidates graduate with a pass, *cum laude*, *magna cum laude*, or *summa cum laude*.

The Honors Degree curriculum is designed:

1. to provide an intensive liberal arts education; and
2. to ensure a solid preparation for graduate school.

These objectives are attained by stressing genuine depth in the major field and ability to work independently. All students are required, in addition to satisfying the major field requirements for the normal degree, to pass a comprehensive examination, and to complete a research project with its associated thesis. They are also required to follow a planned independent study sequence having a systematically increasing level of difficulty and freedom to choose the topic of study combined with a decreasing level of supervision.

To graduate from the Honors Degree Program, candidates must satisfy residence, course, credit, grade and examination requirements.

A. Course and Credit Requirements

Courses	No. of Courses
1. Major Field	
a. All required courses for the normal B.A. degree	10-16
(Combined Major	8+8)
2. Independent Study	
a. Directed or Independent Study (Sophomore)*	1
b. Independent Study (Junior)**	1
c. Research Project (Senior)***	2
3. Electives	7-13
Total	27

*Students with little or no experience with independent study should take a winter term course listed as a Directed Study. Others should take a course listed as an Independent Study in the winter, fall or spring term. Winter term Intensive Courses may not be taken to satisfy this requirement without the permission of the Honors Degree Supervisory Board.

**In consultation with a supervisor, the student chooses a subject not offered in any college course, studies on his/her own, and then takes a written and/or oral test at the end of the term. No theme paper should be required.

***Final proposals should be presented to the Honors Degree Supervisory Board for approval not later than the end of the spring term of the student's junior year. After approval, the Board will appoint an Examining Committee which will examine the student orally on the completed project, grade it and make recommendations for graduation. Departmental Senior Research Projects may be submitted to satisfy this requirement, but will not be accepted unless they are worth two course credits. The same project cannot be employed to earn more than two course credits.

B. Grade and Examination Requirements

The following table lists the grades students must achieve to earn the honors degree and to graduate *cum laude*. Graduation *magna cum laude* and *summa cum laude* are at the discretion of the student's Research Project Examining Committee.

Requirement areas:

	Cum Laude	Pass
1. Cumulative Average	11.00	9.50
2. Research Project	B +	B -
3. Comprehensive Examination*	B +	B -

*This may be based on the field test of the Undergraduate Program for Counseling and Evaluation (if administered in the student's major field), the advanced test of the Graduate Record Examination, a departmentally administered examination, or other examination approved by the Supervisory Board.

C. Review

At the end of each fall and spring term, the Supervisory Board will review the academic standing of all students in the program. Those not meeting the minimum requirements will be issued academic warnings and may be dismissed from the Honors Degree Program after the expiration of one full term (14 wks).

Students who drop out of the Honors Degree Program into the regular program will continue to be exempt from the general distribution requirements for the normal B.A. degree from which they were originally excused, but they will usually be required to complete 36 courses and the other requirements for the normal degree.

D. The Four-Year Option

Upon application to the Chairman of the Supervisory Board, a student may be granted permission to extend his/her studies into a fourth year. This option is not provided to help weak students to satisfy the graduation requirements for the Honors Degree, but rather for students who wish to enrich their undergraduate experience, or to improve their chances for acceptance by a medical school, law school or other graduate school. It may be used, however, in those few cases in which, because of tight prerequisites, it is impossible for a student to fit his or her major requirements, without hardship, into three years.

II. THE HONORS AT GRADUATION PROGRAM

The degree of Bachelor of Arts with distinction will be awarded at graduation to students whose academic records give evidence of particular merit. Such an honor may be awarded With Distinction, With High Distinction, or With Highest Distinction, according to the student's level of achievement. All degrees with distinction will be noted on the diploma, the student's transcript, and the commencement program.

The award with distinction is made by the faculty of the College. In making such awards the faculty will take into account the following criteria:

1. the candidate's grade point average:
Graduation With Distinction: 10.50 to 11.00
Graduation With High Distinction: 11.01 to 11.50
Graduation With Highest Distinction: 11.51 to 12.00
2. the candidate must receive for any one of these awards the endorsement from the department in which he/she has done his/her major work. The chairman of the department will notify the Registrar of the College of departmental approval.

III. THE HONORS IN THE MAJOR FIELD PROGRAM

The Honors in the Major Field Program provides for students who have shown excellence in their major field to be eligible for independent research or special study during their senior year, under the supervision of a three member committee in the student's major department and selected by that department.

In order to be eligible for participation in this program the student will have to:

- have achieved a minimal overall grade point average of C+ (7.00) for all courses while enrolled at Rollins.
- have achieved a minimal overall grade point average of B+ (10.00) for all courses taken in the major field while at Rollins.
- have received the endorsement of his or her committee for participation in this program.

Satisfactory performance in an approved thesis or individual project, an oral examination, and maintenance of the above averages will qualify a student for Honors in the Major Field, which will be shown on the student's transcript.

MAJORS

At Rollins College a student may graduate with a major, a combined major or an area studies major.

I. MAJORS

Anthropology / Sociology	German
Art	History
Biology	Mathematics
Business Administration	Pre-Medicine
Chemistry	Music
Economics	Philosophy
Elementary Education	Philosophy and Religion
Pre-Engineering (3-2 Program)	Physics
English	Political Science
Environmental Studies	Psychology
Pre-Forestry (3-2 Program)	Spanish
French	Theatre Arts

II. COMBINED MAJOR

A combined major in two departments may be earned if approved by a student's advisor and the departments concerned. Such majors should have coherence and depth and be deemed better to meet the needs of the individual student than the normal majors offered. Certain majors, such as Communications, are offered only as combined majors.

Combined majors require the completion of eight of the courses required in the regular major of each department concerned. When one of the majors is music, four years of applied music and four years of ensemble participation will be required. The form for applying for a combined major may be obtained from the Registrar's Office.

III. AREA STUDIES MAJOR

An area studies major may be proposed by a student seeking interdisciplinary concentration in an area not available in a single department or two departments combined. For instance, two area majors already clearly identified are Latin American Studies and International Relations. The following guidelines and procedures are applicable to these areas and to any other proposals:

A. An area major must involve at least three academic departments and include a minimum of sixteen courses. Half of these courses must be at the upper division level (courses numbered 300 or above). At least two of these upper level courses must be in one department, excluding independent study and the senior project or senior seminar requirement. Of the sixteen courses, the student will complete a project or seminar which will be equivalent to two courses.

B. A student wishing to enroll in the program must obtain the consent of two faculty members in different departments within his/her area to act as advisors. Together they will construct the student's proposal which will be submitted to the Vice Provost. All applications must be approved by the Vice Provost and a small faculty committee on area majors. It is the responsibility of the advisors and the committee to ascertain that each area major is academically strong and projected through graduation. Any changes from the approved program will require consent of the Vice Provost.

THE ACADEMIC CALENDAR

The academic calendar consists of a 14-week fall term, a 5-week winter term, and a 14-week spring term. The winter term has been adopted to place emphasis on directed and independent study, discussion seminars on topics not generally explored in depth in the longer terms, and off-campus projects proposed by students for approval by an advisor, an off-campus sponsor, and a review committee. There are also off-campus studies which usually involve foreign travel and require supplemental funds.

STUDY ABROAD

In addition to the winter term off-campus studies in foreign countries, Rollins also offers summer tours to Spain and France and the opportunity to pursue a full course of study in Ireland or Australia during the fall term, or in Colombia during the spring term. For details and applications contact Dr. Frank Sedwick, Box 2665, Rollins College, Winter Park, Florida, 32789. Phone: (305) 646-2386.

COURSE LOAD

A full academic load is defined as 4 courses during each of the fall and spring terms, and 1 course during the winter term. A course is considered equal to five quarter hours for accounting and transfer purposes. Any student registering for more than 4 courses in the fall or spring term must have the program approved by his/her advisor and by the Vice Provost or the Registrar. No student may register for more than one course or independent study project during the winter term, and it is expected that a minimum of forty hours per week will be devoted to that subject. The single exception to this rule is that two courses may be taken if one of them is ROTC. Students must be enrolled in at least three courses to be considered full-time students.

CLASSIFICATION OF STUDENTS

Sophomore standing	9 courses
Junior standing	18 courses
Senior standing	27 courses

REGISTRATION

Students must present themselves for registration on the days that are assigned for that purpose. Completion of registration after the regularly appointed period subjects the student to a \$15 fine.

DROP/ADD POLICY

All changes in registration require the permission of the advisor, the instructor, and the Registrar, and should be made during the first week of the term. A course dropped after the first week of classes in any term is recorded as W if the work to date is passing, or WF if failing, on the student's permanent record. The grade XF is recorded for a course abandoned without an official withdrawal. Both WF and XF are computed in the student's averages as failures. After the middle of any term, a student may not withdraw from a course without a failing grade, except for illness or other major reasons to be defined and recommended by the Office of Student Affairs.

CLASS ATTENDANCE

Permission to be absent from a class must be obtained from the professor responsible for that class. A student who is absent from any class without permission may be penalized by the lowering of his/her grade for the course.

Each student will be responsible for all absences from class. It is the student's responsibility to arrange with the professor to make up the work missed. In this respect there is no difference between excused and unexcused absences. If a student is not in attendance at class for any reason, he/she is considered absent.

A student who is necessarily absent from the campus for an extended period of time or because of an emergency should inform the Office of Student Affairs. This will enable the College to relay important messages to the student.

AUDITS

A student may audit a course with the permission of the instructor and the Registrar. Academic credit is not awarded for audited courses, but they are recorded on the student's transcript.

EVALUATION OF THE STUDENT'S WORK

GRADES

The grade report is based on the following principles:

Grade A is reserved for work that is exceptional in quality, for work showing keen insight, understanding and initiative.

Grade B is given for work that is consistently superior, for work showing interest, effort or originality.

Grade C is a respectable grade. A C average (6.00) is required for graduation. It reflects consistent daily preparation and completion in a satisfactory manner of all

work required in the course.

Grade D is the lowest passing grade. It is below the average necessary for meeting graduation requirements and ordinarily is not accepted for transfer by other institutions.

Grade F is failing.

For each course credit, letter grades are assigned quality points as follows:

Grade A	12 quality pts.	Grade C -	5 quality pts.
Grade A -	11 quality pts.	Grade D +	4 quality pts.
Grade B +	10 quality pts.	Grade D	3 quality pts.
Grade B	9 quality pts.	Grade D -	2 quality pts.
Grade B -	8 quality pts.	Grade F	0 quality pts.
Grade C +	7 quality pts.	Grade WF	0 quality pts.
Grade C	6 quality pts.	Grade XF	0 quality pts.

INCOMPLETE WORK

A grade of I indicating that the work of a course is Incomplete, may be assigned only when circumstances beyond the control of the student, such as illness or necessary absence from the campus, have made it impossible for the student to complete the work of the course within the normal period. A student receiving a grade of I in the fall term or in the winter term must complete the work of the course no later than mid-term of the succeeding spring term. A student receiving a grade of I in the spring term must complete the work of the course no later than mid-term of the following fall term. Failure to complete the course in the designated time will result in the assignment of a grade of F.

CREDIT/NO CREDIT

A student must notify the Registrar's Office in writing no later than two weeks after the beginning of the fall or spring term, and one week after the beginning of the winter term, that he/she wishes to take a course on a credit/no credit basis. Courses in the major field and courses used to fulfill general education requirements may not be taken credit/no credit. The grade of credit will not be figured in the grade point average, but will be given academic credit. No more than one course per term may be so designated and a maximum of four such courses will count for graduation. A winter term course taken on a credit/no credit basis is not counted toward the four such courses which may be taken in the fall or spring terms; however it must be an elective. A student may not subsequently receive a grade for a course elected to be taken credit/no credit.

PRESIDENT'S AND PROVOST'S LISTS

The President's and Provost's Lists honor those students with a particularly high academic achievement in the previous fall or spring term. To be included on either list, during the immediately preceding term a student must have completed a minimum of three courses with a grade and earned the following term averages: 11.00-12.00 for the President's List, and 10.00-10.99 for the Provost's List.

ACADEMIC PROBATION AND DISMISSAL

Academic probation is intended to give the student opportunity and encouragement to achieve and maintain good academic standing.

Because a cumulative average of 6.00 (C) is a requirement for graduation, it is in the best interest of the student that he/she maintain reasonable progress. With this in

mind, and in order to uphold the academic standards of the College, policies of academic probation and dismissal have been established, as shown below.

Because of its special nature, the winter term is NOT considered separately in applying these standards.

Academic Probation

A student who falls within either of the following categories will be placed on academic probation:

1. Students who receive a grade below C — in two or more courses in any term.
2. Second and third year students whose cumulative average falls below 6.00.

Removal from Academic Probation

At the end of each fall and spring term each student's academic record will be reviewed. Students on academic probation will be removed from probation if they fall within neither category 1 nor category 2, above.

Academic Dismissal

A student falling within any one of the following categories will be dismissed from the College:

1. Students whose cumulative average is less than 5.0 at the end of their first year, less than 5.5 at the end of their second year, less than 6.0 at the end of their third year.
2. Failing two or more courses in any one term (except first term Freshmen and students whose cumulative average remains above 6.0).
3. Failing one course in any term while making less than a 5.0 average in other courses (except first term Freshmen and students whose cumulative average remains above 6.0).
4. Failure to be removed from probationary status after a single term on academic probation.

If the student believes there are extenuating circumstances which justify an appeal of academic dismissal, such appeal must be made in writing by the student to the Vice Provost, who serves as Chairman for a committee consisting of the Dean of Student Affairs, the Registrar, the Chairman of the Educational Policy Committee, and the Director of Admissions, or their chosen representatives.

The term "Academic Dismissal" implies to other college administrators that a student has been involuntarily separated from the College because he/she has not met the minimum academic standards. Transcripts of students who have been dismissed will bear the notation "Academic Dismissal." Any undergraduate student who is academically dismissed from Rollins College is academically dismissed from all programs offered by the College.

READMISSION

Rollins College will not consider a request for readmission from a dismissed student in less than one calendar year from the date of dismissal. Applications for readmission will be considered after that time; students are expected to present tangible evidence that they will do successful work if readmitted. Such evidence may consist of a transcript of successful work at another academic institution, proof of satisfactory

military service, letters reporting gainful employment with statements from supervisors concerning motivation, performance and job maturity, or other documents of a similar nature. Application for readmission is made to the Vice Provost of the College.

WITHDRAWAL

A student may voluntarily withdraw from Rollins by filing a withdrawal form in the Office of Student Affairs. After the first week of classes, the withdrawal from courses will be recorded on the student's transcript.

LEAVE OF ABSENCE

Students may take a leave of absence from Rollins College for the winter term, but they will not receive either a tuition or room refund for that term. An appropriate refund for board will be made. Leave of absence forms are available in the Office of Student Affairs.

THE GRADUATE RECORD EXAMINATION

All seniors who are interested in graduate school are urged to take the Graduate Record Examination (Aptitude). Most graduate schools either require or request candidates to take this examination. It is given in October and April each year at Rollins, which serves as a Center for this purpose, and is so designated by the Educational Testing Service of Princeton, New Jersey.

OBTAINING AN OFFICIAL TRANSCRIPT

Unofficial transcripts are sent to all students at the end of each term free of charge. Students will receive one official transcript free of charge upon graduation from Rollins College. Additional requests for official transcripts must be made in writing to the Office of the Registrar, Rollins College, Winter Park, FL. 32789. There is a fee of \$2.00 for each official transcript.

Courses of Instruction

•ANTHROPOLOGY-SOCIOLOGY

The Anthropology-Sociology major program offers the student a basic understanding of the cultural and social factors influencing human behavior. Courses within this field focus on a wide range of topics including the meaning of human interaction as well as the processes and structures related to them. Patterns of cultural and social organization and social institutions such as the family, education, law and medicine are examined in detail in our substantive courses; social and cultural processes such as change, stratification, socialization and social control are also emphasized in the courses we offer at all levels. Studies of primate behavior, archaeology, the biological basis of human society, and the development of civilization are part of the multi-disciplinary approach followed by this department. Students are expected to become acquainted with various theoretical perspectives, their historical development, and a variety of different research methods commonly used in these two disciplines. By synthesizing various facets of what it means to be human on a biological, historical, cultural and social level, this department is ambitiously multi-disciplinary. Consistent with the liberal arts tradition at Rollins, the major in Anthropology-Sociology seeks to educate the student in a number of different perspectives designed to make human behavior more intelligible.

Our majors include students with a wide range of interests including those wanting to do counseling work with delinquents, those interested in the management of people within corporations, and those who seek other kinds of career opportunities which require a real understanding of human behavior. Recent graduates have pursued professional training in a variety of different areas including sociology and anthropology, archaeology, urban planning, business administration, management, and the law. The Anthropology/Sociology major is an excellent preparation as well for persons not contemplating immediate employment but who as family members and concerned citizens wish to understand how political and economic changes will affect their futures.

The Anthropology-Sociology Major Program

1. A major in Anthropology-Sociology requires a minimum of twelve courses, at least eight of which must have been taken within this department.
2. In order to prepare the student in the fields of both anthropology and sociology, a multi-disciplinary core program is required. There are four core courses:
 - (1) AS 200 The Evolution of Human Society
 - (2) AS 201 Cultural Anthropology
 - (3) AS 243 Social Stratification
 - (4) AS 303 Methodology
3. The student is also required to take:
 - a. either AS 345 The Development of Social Thought, or AS 358 The Development of Anthropological Thought, preferably during the junior year.

- b. Two additional 300 or 400 level courses in the department.
- c. In the senior year one senior seminar and/or one semester of senior research-internship-field experience.

No senior research-internship-field experience can be done until the core program has been completed to include either The Development of Social Thought or The Development of Anthropological Thought.

- 4. Based on the above policies no student can transfer into Rollins as a senior and expect to graduate in the period of one academic year.
- 5. In order to graduate with a major in Anthropology-Sociology, the student must maintain a 7.0 average for courses taken in this department.

Career Opportunities based on Anthropology-Sociology

In a time when the fastest growing segment of the labor market is in the personal services area, a degree in Anthropology-Sociology offers the college graduate a good background upon which to implement a wide variety of career goals, some on the basis of work done at the undergraduate level. Recent graduates have been employed in marketing, law enforcement, rehabilitation, and a wide variety of administrative work. Careers in the fields of labor relations, social work and hospital or industrial management are all available to the person with a degree in Anthropology-Sociology.

The Department offers training and education in various kinds of research skills which have proven to be essential to many different government, industrial, or social service careers. But, as is becoming increasingly clear, many of the better jobs in these areas are now requiring somewhat more specialized training at the graduate level. Thus, we feel it is a basic disservice to many of our brighter and more highly motivated students if we do not apprise them of the necessity for graduate study in today's job market and help them to prepare for success in it. Students whose interests will lead them to continue on with graduate work are identified early and given the advice which will help them make a wise selection in their course of study.

At the time a student chooses to major in Anthropology-Sociology an advisor will be assigned. The advisor will work closely with the student until graduation, and will give the help needed for the student to make a wise choice of both personal and future career goals.

AS 100 Peoples and Cultures of the World [C]

Through a comparative survey of past and present peoples of the world, this course introduces students to the diversity and underlying unity of human culture from an evolutionary and ecological perspective. Suitable for non-majors. M. Stewart

AS 112 The Family [S]

An examination of how political, economic and social changes affect the nature of marriage and the family currently and in coming decades. Issues of divorce, abortion, homosexuality etc., are discussed in light of the course reading. Studies of comparative family structure are included as well as an analysis of changing sex roles in terms of the larger social changes occurring in our society. Suitable for non-majors. T. Harblin/J. Weiss

AS 192 Archaeological Field Methods

Students participate in an ongoing archaeological project in Central Florida, learning methods of archaeological survey, mapping, excavation, and artifact handling. We

are primarily interested in examining the ecological relationships of Central Florida Indians of the past in order to better understand humankind as part of the natural system. Intensive course offered in the Winter Term. M. Stewart

AS 200 Evolution of Human Society [C]

An introduction to physical anthropology. Considers how man, his life style and social behavior have changed from prehistory through the rise of civilizations. Comparative material from modern non-western cultures is used to reconstruct ancient lifeways. Exploring these lifeways provides insights into the universal nature of some of the problems of western society and alternate methods for solving these problems. Appropriate for non-majors. C. Lauer

AS 201 Cultural Anthropology [C]

The purpose of this course is twofold: (a) to introduce the individual student to the basic concepts and methodology in the study of culture and human socialization, and (b) to make a comparative analysis of the cultural systems of both pre-industrial and industrial societies in terms of context and meaning. Throughout this course special focus will be placed upon the interrelationships of cultural adaptation and human behavior. The concept "culture" will be employed to refer to the ideational codes of a people with which they conceptualize their world and interact with one another. The course is both cognitive and phenomenological in its interpretations of man's behavior and his socio-cultural system. Suitable for non-majors. P. Pequeno

AS 203 Biology, Culture and Society [C]

A comparative look at social behaviors, customs, and institutions in non-western societies that examines the basis of these systems in traditions, ecology and genetics. Topics discussed include territoriality, aggression and war, sex roles, kin systems and language. Appropriate for non-majors. C. Lauer

AS 207 Medical and Health Care Delivery [S]

Issues and changes in the organization and delivery of medicine and health care. Themes will include: health as a basic right, an optional service, preventive v. curative treatment, health education needs, financing, the role of government, comparative national models, standards and evaluation, etc. Guest speakers, audio-visual materials. Lecture/discussion. T. Harblin

AS 215 North American Archaeology [C]

A study of North American Indian archaeology up to the time of contact with Europeans. Where the Indians came from, their adaptation and evolution, their customs and beliefs, and influences from the high civilizations of Mexico. M. Stewart

AS 230 Sex and Gender Roles

This course considers the problem of whether sex roles are primarily culturally or genetically determined. It examines the biology of sex differences and then turns to a cross cultural study of sex roles. Material from non Western societies will be reviewed and then the present and future status of the sexes in our own culture will be considered. Suitable for non-majors. C. Lauer

AS 235 Anthropology of the Past [C]

An introduction to the study of past cultures through a variety of sources, including anthropological, historical, and archaeological. Emphasis is on culture change and adaptation in such widely different cultures as Colonial America, plantation slavery in America, North American Indians, and ancient civilizations. Suitable for non-majors. M. Stewart

AS 240 Introduction to Archaeology

An introduction to the field of archaeology with an emphasis on the cultural evolution of man from stone age hunters to city-dwellers. In addition to past cultures, living cultures that are different from modern industrial civilizations will be explored. The goal is to learn about our cultural selves through the study of other cultures, past and present. Suitable for non-majors. M. Stewart

AS 243 Social Stratification [S]

An examination of structured social and economic inequality in various forms and contexts, e.g., migrant agricultural workers, social classes, multinational corporations and prisons. Attention is given to theory and to the historical and comparative development of stratification models. T. Harblin/J. Weiss

AS 245 Law and Society [S]

Examines law as a system of social control, the underlying assumptions of law, the structure and organization of legal institutions, law as an instrument of change, treatment of law violators, general research in the field. A. Jones

AS 257 Area Studies in Anthropology

A single culture area of the world is selected for intensive analysis of the people and their cultures. Different areas will be selected for each term. May be repeated for credit providing that a different culture area is studied.

AS 258 North American Indians [C]

In-depth analysis of various Indian cultures and their adaptive responses to changing environments through time. It is the purpose of this course to introduce students to North American Indian culture, in both its traditional and modern aspects, to induce a sensitivity to the problems of these very real people, and to place both Native American and "Anglo" culture in anthropological perspective. Suitable for non-majors. M. Stewart

AS 259 Cultures & Peoples of the Caribbean [C]

Surveys basic anthropological and sociological approaches dealing with the Black cultures of the Caribbean, and in some instances with the Black in the U.S. South. Major topics include: (a) history and the colonial heritage (b) slavery and its impact on culture and society; (c) the plantation system and its detrimental economic consequences; (d) the social structure (the family and household) of contemporary Caribbean societies; (e) ethnicity and ethnic group relations; (f) the nature and function of Afro-Caribbean folklore and religion; and (g) the nature, consequences, and future of Black ideology, revolutionary consciousness, and nationalism in contemporary Caribbean societies. Suitable for non-majors. P. Pequeno

AS 260 The Peoples and Cultures of Latin America [C]

Surveys the study of culture in Mexico, Central America, and Northwestern South America (Colombia, Peru, Bolivia) in terms of their pre-Colombian and ecological development, cultures during initial contact with Spanish civilization, and present social, economic and acculturative problems. Many special features of development in Latin America will be covered such as: the Hispanic and Portuguese inheritance and their major themes in Latin American life; the Indian population, its philosophy, and its identification; the "closed" and "open" community; and the nature and function of Latin American socio-political and religious organizations. Several predictions about the future of Latin America will also be included. Suitable for non-majors. P. Pequeno

AS 271 Deviant Behavior [S]

A sociological analysis of current patterns of behavior which our society labels "deviant." To be discussed are topics such as drug abuse, sexual deviations, etc., with emphasis on how these deviant patterns may be changing the value and normative structure of our society. J. Weiss/A. Jones

ES-AS 275 Population [S]

Introduction to issues related to population growth and decline, the consequences for man's relationships to his environment and the development of societies and styles of life. Some attention is given to historical and comparative patterns, concepts of demography, and various models of population control at the collective and individual levels. Alternate years. T. Harblin

AS 280 Social Gerontology [S]

This course explores, among other things, a number of anthropological and sociological propositions about the elderly found in most societies, from "primitive" to industrialized; what human behaviors are truly universal in the culture of the elderly; the elderly's living environments (i.e., the nursing facility, the rehabilitation hospital, and the retirement community); the effects of aging on sex and skills; the psychopathology of human aging; and death and bereavement. P. Pequeno

AS 295 Origins of Civilization [C]

A survey of the early civilizations of the world and their roots, especially the Sumerians, Egyptians, Mayans, Aztecs and Incas. Emphasizes past lifeways and processes of culture change as compared to modern civilization. Suitable for non-majors. M. Stewart

AS 297 Field School in Primate Behavior

This course is an intensive study of primate behavior and of field techniques in animal behavior. Following two weeks of readings and seminars held on the Rollins campus and trips within the area, students will leave for Puerto Rico where they will observe colonies of monkeys at La Parguera, St. John, and Cayo Santiago. Students will make daily observations of the monkeys, experiment with several field techniques, and finally concentrate observations on one particular aspect of behavior. Students will also visit some other Caribbean research facilities to become familiar with work on primate reproductive behavior, as well as tropical and coral reef ecosystems. Winter Term only. C. Lauer

AS 303 Methodology

Emphasis is placed on the actual gathering of social science data, primarily from the point of view of the sociologist. Issues in the philosophy of science, the development of research strategies, and ethical/political problems of research are examined in the course. Special attention is given to the application of social data toward understanding organizational effectiveness. A. Jones

AS 307 Fossil Man

An examination of the fossil evidence for human evolution. The relationships between evolutionary processes and physical changes are considered in the context of culture as man's primary means of adaptation. C. Lauer

AS 311 Topics in Sociology

A course designed to analyze in depth a number of topics of concern to the contemporary sociologist. Instructor and students will be co-participants in the study of

topics such as war, occupational structures, contemporary social movements, etc. May be repeated for credit as long as a different topic is taken.

AS 312 Total Institutions [S]

Prisons, certain hospitals, some schools, asylums, orphanages, etc. may be described as total institutions. Behavior is highly structured according to regulations prescribed and maintained by those who manage the various systems. The course examines the nature of such institutions in our society and the impact they have on humans forced to live therein. A. Jones

AS 313 Alcohol and Society [S]

This course will examine general cultural perspectives on alcohol, alcohol abuse, and alcoholism. Patterns of alcohol use among differing groups of Americans are studied according to age, sex, ethnic status, and socioeconomic status. Field experience with several local treatment programs will provide the student with a realistic perspective of types of problems and treatment programs. A. Jones

AS 314 The Human Skeleton

The study of the human skeleton from modern and archaeological material. Topics discussed include: bone histology, morphology and identification, the sexing and aging of skeletons, pathology, measurements and how to analyze skeletal populations. Emphasis is placed upon students working directly with skeletal material. Alternate years. C. Lauer

AS 315 Primates

The primate order will be surveyed with an eye toward understanding physical and social characteristics of living species, fossil primates and the implications of nonhuman primates for human evolution. Consent. C. Lauer

AS 316 Topics in Anthropology

A course designed to present an in-depth study of the many contributions anthropology makes to an understanding of man and his socioenvironmental setting. Various perspectives are addressed each term. May be repeated for credit as long as a different topic is taken.

AS 317 Anthropology and Modern Social Issues

Introduces the student to the major social and cultural issues confronting society today, e.g., overpopulation, pollution, poverty, prejudice, racism, violence and war, the generation gap, the uneven distribution of resources among classes and nations, and the ethical responsibilities of institutions, etc., and how to study them from a scientific and humanistic standpoint. The question to be asked is: What does the anthropologist — as a professional social scientist and as a member of society — have to say about the pressing issues confronting mankind today? P. Pequeno

AS 318 Urban Sociology [S]

Examines the impact that technology, population and the environment have had upon urban social organization. The second half of the course focuses on the number of urban social problems that have negatively affected the quality of life in American urban areas. Historical data, current demographic trends and urban planning efforts are discussed. A research paper is required. Appropriate for non-majors. A. Jones/J. Weiss

AS 320 Social Change and the Future [S]

A study of social change processes and how they affect the organization of societies,

man's relationship to his environment, and the nature of future life styles. Attention will be given to violence and comprehensive public planning as alternative means to direct social change. T. Harblin

AS 330 Juvenile Delinquency [S]

Examines the development of delinquency acts and the social response to them. Family organization, peer influence, education, and the juvenile justice system are considered. Results of delinquency research are reported. Juvenile treatment programs are evaluated. A. Jones

AS 333 Human Variation

The purpose of this course is to study human ethnic groups, races and types from the physical anthropologist's point of view. Human variation will be examined in light of genetic and environmental factors. The historical background of the subject matter as well as related (current) nature/nurture controversies will be discussed. C. Lauer

AS 335 Sociological Inquiry

This course examines the philosophical basis of the social sciences, with particular attention to the field of sociology. The concerns of the early founders of the discipline of sociology are examined in light of contemporary trends within the field. The role of values in sociological inquiry, the question of how one goes about applying the general scientific model to the field of sociology, and the different biases researchers bring to their problems are examined. A general sociology of knowledge frame of reference is developed and its implications for the current state of knowledge in sociology are discussed. J. Weiss/T. Harblin

AS-ED 342 Sociology of Education [S]

The role of the school in providing certain important functions is examined, with particular emphasis on political and economic dimensions. The internal structure of American education is analyzed using sociological concepts with a stress on conflict and change. Student papers, presentations, small discussion groups, films and TV tapes. Appropriate for non-majors. A. Jones/J. Weiss

AS 345 Development of Social Thought

An examination of the development of the sociological perspective, both in terms of the men who were founders of the discipline of sociology and in terms of the way concepts within sociology have developed and have been modified. J. Weiss/T. Harblin

AS 353 Culture and Personality

A course designed to provide: (a) a synthesis of culture and personality theory based on an analytical discussion of past and present anthropological and psychological concepts on the subject; (b) a comparative (cross-cultural) personality assessment based upon traditional and contemporary behavioristic and psychoanalytic theory; and (c) an introduction to the basic testing devices employed by psychological anthropologists while in the field. Discussions of psychosocial adaptation in childhood and adulthood under conditions of stability and change, and of the effect of dietary practices on personality formation will also be included. Laboratory is required. P. Pequeno

AS 355 Dynamics of Socio-Cultural Change [D, C]

A lecture/seminar course which surveys basic anthropological approaches to the

theory of socio-cultural change (evolutionism, cultural ecology, diffusionism, historical and economic materialism, technological determinism, etc.), and their applications in recent research on tribal and peasant peoples, and on modern industrial society. In addition, the student will be introduced to the basic methodology in applied anthropology and development, and taught to act both as a change agent and as a change analyst. Multi-disciplinary course. Suitable for non-majors, business majors and environmental studies majors. P. Pequeno

AS 358 Development of Anthropological Thought

This course introduces the individual student to issues and concepts in the development of anthropological thought. The course is a requirement for students concentrating in anthropology. P. Pequeno

AS 380 Seminar in Anthropology

A course designed to present different approaches within the field of Anthropology which examine and analyze cultural, biological, and social interaction from a given point of view. Various topics are addressed each term. May be repeated for credit if a different topic is studied.

AS 380A Seminar in North American Archaeology

The anthropology of North American Indians in the past, from their migration into the New World from Asia to the arrival of the Europeans. Various approaches to the study of North American archaeology will be discussed. Consent. M. Stewart

ES-AS 380B Seminar on Culture and the Environment

Comparative study of the ways in which human cultures have adapted to their environments through time and around the world. Asks: What are the effects of technological innovation, population growth, warfare, etc., on humans and their environments? What ecological lessons can we learn from alternative life styles past and present? M. Stewart

AS 380E Seminar on Biblical Archaeology

Culture and history of the ancient Hebrews, early Christians, and their neighbors as described in the Bible and revealed by archaeological findings. Uses archaeology, cultural anthropology, and history to reconstruct ancient life in the Holy Land. M. Stewart

AS 380F Biological Anthropology

Examination of a current controversial topic in the field of Biological Anthropology. Subjects for discussion will be chosen from the areas of fossil man, primate studies, human genetics, human sociobiology and adaptations. C. Lauer

AS 392 Culture and Infancy: The Cross-Cultural Study of Childhood

This course will approach the subject of culture and infancy by analyzing three main lines of inquiry followed by anthropologists and other behavioral scientists, namely: 1) What is life like for infants in other cultures? 2) How do different patterns of socialization in other cultures prepare their infants for life in these cultures? 3) How do the tremendous changes in traditional societies caused by Westernization and modernization affect their childbearing and socialization practices? One of the aims of the course is to clarify the boundaries between "nature" and "nurture." The course is open to all students, but the consent of the instructor is required. P. Pequeno

AS 490-495 Research/Internship/Field Experience

This course is designed to allow the student to pursue a wide variety of independent

study projects. Matching student and faculty interest where the appropriate staff member serves as the project sponsor is essential to its success. Student directed and conducted research projects in a variety of settings to include the community, laboratory or library are possible. Internships with local institutions such as the police, courts, hospitals, schools and mental health agencies, and field experience in these situations are also possible. Staff

•ART

Larned (Head), Hallam, Lemon, Peterson

The areas of career possibilities that have their foundations in art are diversified, encompass many fields, and are growing in direct proportion to an ever-increasing awareness of a need for the arts. Art fields offering career opportunities are publishing, industrial design, fashion design, advertising art, photography, interior design, illustration, museums, archives, galleries, arts management, and teaching in secondary and higher education fields.

The art major with an emphasis in studio or art history is structured to give the art student a broad foundation of concepts and skills upon which to build a successful career in these fields. After graduation, art majors are encouraged to attend either graduate school or a professional art school for the necessary specialization in their chosen field. Many career fields require a degree of specialization that is beyond the scope and purpose of a liberal arts curriculum.

The student may choose a program emphasizing either studio art or history of art. For studio concentration the student should schedule two courses, Introduction to Studio Methods 131 and Art Structure 132 (to be taken in the freshman year) and the two courses, Introduction to Art History 201 and 202.

For art history concentration the student should schedule Introduction to Art History (both terms), either Introduction to Studio Methods or Art Structure, and one intermediate level studio course.

Studio Concentration

Introduction to Studio Methods	(131)
Introduction to Art History	(201, 202)
Drawing and Composition	(221)
Intermediate Studio	(3 courses)
Advanced Studio (should include painting and sculpture)	(5 courses)
Independent Study	(1 course)

Art History Concentration

Introduction to Studio Methods	(131)
Intermediate Studio	(1 course)
Introduction to Art History	(201, 202)
Period Concentration (classes or directed study)	(6 courses)
Independent Study	(1 course)

Related Courses

To achieve breadth in his/her college program the student majoring in Art should select at least four courses from the following group of associated courses.

1. Aesthetics
2. World Literature

3. Old Testament
4. Technical Theatre
5. Masterpieces of Music Literature
6. European History
7. 20th Century Drama
8. 20th Century Poetry

Studio majors will be required to participate in the Senior Art Exhibition at the end of their senior year.

A 101 Introduction to Art and Artists [A]

A non-historical study of visual arts and architecture. Slide lectures, discussions and trips to Loch Haven Art Gallery. Appropriate for non-majors. R. Lemon

A 104 Comparative Arts [A]

This course will operate on the premise that art, architecture, literature, music and the affiliated arts share a common aesthetic in the given age in which they are generated. In this course the student will be given critical tools to make a comparative study of the arts. Appropriate for non-majors. R. Lemon

A 131 Introduction to Studio Methods [A]

A general introduction to several areas of the art curriculum for the benefit of both incoming art majors and interested non-majors. Instruction will involve concepts and techniques related to drawing, painting and printmaking. Required of majors in the first year. T. Peterson

A 198 Photography I [A]

An introductory course to acquaint the student with the fundamentals of the camera and darkroom techniques. Course will cover basic camera operation, a variety of films, papers, developers, and printing techniques. Prerequisites: A 131 or A 222 or consent of instructor. R. Larned

A 201, 202 Introduction to Art History [A, D]

Chronological survey of visual art — architecture, sculpture and painting. Illustrated lectures, discussions and outside reading reports. (High school credit in survey of art history accepted). Required for majors, appropriate for non-majors. The first semester will cover western art from pre-history through the Middle Ages. In the spring term, the course will survey the visual arts from the Italian Renaissance to the present. H. Hallam

A 219 Arts of Ancient Civilizations [A, D]

This course concentrates on Egypt, Mesopotamia, Anatolia, Crete, Greece, and Rome, tracing the intermingling of influences in architecture, sculpture, painting and the minor arts. Alternate years. H. Hallam

A 220 Nineteenth-Century Art [A, D]

This course traces the succession of styles in nineteenth century painting, highlighting the leadership of France, and showing in the paintings of the nineteenth century the basis for abstract art of the present time. Prerequisite: Sophomore standing or consent of instructor. H. Hallam

A 221 Drawing and Composition [A]

Covers the range from still lifes to figure studies to abstracts. All drawing media such

as ink, pencil, charcoal and conte are explored. Composition is discussed both individually and in class critiques. Required of art majors in second year. R. Larned

A 222 Two and Three Dimensional Design [A]

Course explores graphic design concepts and three dimensional form. A variety of design areas will be considered such as package design, advertising art and functional design. The design fundamentals provide a foundation for studies in sculpture, painting and graphics. R. Larned

A 223 Twentieth-Century Art [A, D]

A study of the influences, origins and trends in painting since the Impressionist movement of the 1870s through the various abstract styles of this century. Art is studied in the context of reflecting social and political values of modern times. Prerequisite: Sophomore standing. H. Hallam

A 225 Themes in Art [A]

Slides and lectures will present a concentrated study of often-used subjects, showing why they were introduced into art and how they develop as the culture they reflect changes with time. Cutting across national borders and through historic periods, the study will trace the course of such predominant themes as the Bible, mythology, landscape, still life and the portrait. Appropriate for non-majors. Alternate years. H. Hallam

A 231 Painting I [A]

A foundation level studio course providing a framework of ideas and experiences related to the structure of painting and to the creative process. Students will draw, paint and discuss their work in individual and group critiques. May be taken by majors and non-majors. Prerequisite: Art 131 or consent. T. Peterson

A 232, 332 Special Studies in Drawing and Painting [A]

Intermediate and advanced level studies in the related fields of drawing, painting. Special attention will be given to the development of individual points of view, relating to the student's prior experience in drawing and painting. Prerequisite: A 131 for 232; 231 for 332 or consent. T. Peterson

A 241, 242 Sculpture I [A]

An exploration of traditional and contemporary sculpture modes and techniques with the objective of giving the student a general understanding of the basic sculptural processes. Designed as a foundation course for later studies into specialized areas and techniques. May be taken by majors and non-majors. R. Larned

A 252 Printmaking I [A]

Introduction to metal plate, intaglio printing. Students will develop plates through the processes of hard and soft ground etching, aquatint and engraving. Both black and white and color printing techniques will be studied. Prerequisite: Art 131, 222 or consent. May be taken by majors and non-majors. T. Peterson

A 261, 262 Jewelry Design I and II [A]

Basic and advanced studies of design styles and techniques. I: Basic silversmithing techniques and centrifugal casting. II: Design stressed. Alternate years. R. Larned

A 272 Woodblock Printing [A]

Techniques of both plank-grain and end-grain block cutting, engraving and printing are studied, may be taken at beginning and advanced levels. Prerequisite: A 131.

A 290 Indian Art of Continental U.S. [A, D]

This is a survey of North American Indian art both ceremonial and utilitarian, beginning with the prehistoric mounds of the Ohio River Valley through the crafts of the twentieth-century Southwest. Examples of the arts of the many tribes will be studied, organized into the following geographical areas: Woodlands, Southeast, Plains, Southwest, Great Basin, California, and Northwest Coast. Term paper. Field experience. Alternate years. R. Lemon

A 309 Medieval Art and Architecture [A, D]

A study of architecture, sculpture, painting and the minor arts. Lectures consider the decline of classical art, the emergence of Early Christian and Byzantine art, the interrelationships between arts of the East and the West. Special attention is given to sources and development of Romanesque and Gothic styles, examined as symbols of human life, belief, and ideas. Prerequisite: Sophomore standing. Alternate years. H. Hallam

A 310 Northern Renaissance Art [A, D]

Northern Renaissance art concentrates on the development of painting techniques, the variances of styles, and the iconology of the 15th and 16th century. Analogies between visual arts and contemporary humanist ideas are explored. Prerequisite: Sophomore standing. H. Hallam, R. Lemon

A 311 Italian Renaissance Art, I [A, D]

A chronological study of the first half of the Italian Renaissance. The course begins with the proto-Renaissance painting of Cimabue, Giotto and Duccio, makes an extensive examination of the ideas and aesthetics of the fifteenth century, especially as they were manifest in Florence and Venice. Slide lecture. Term paper. Prerequisite: Sophomore. Required of Art Majors. R. Lemon

A 312 Italian Renaissance Art II [A, D]

In this course the student will study the art and architecture of the High Renaissance and the Mannerist movements. The study begins by looking at the work of Leonardo and Michelangelo in Florence and Rome, and concludes with the painting of Bronzino and Vasari. Slide lecture. Term paper. R. Lemon

A 313 Baroque and Rococo Art [A, D]

The 17th century Baroque style in Italy, Holland, Flanders, France, England and Spain is examined, from its Renaissance and Mannerist sources through its termination in the 18th century Rococo style. Prerequisite: A 311 or 312. Alternate years. R. Lemon

A 322 American Art [A]

A study of architecture, sculpture, and painting in the United States from the founding of the colonies to the present time. The course traces America's emergence from a reflection of European influence to contemporary leadership in the arts. Prerequisite: Sophomore standing. Alternate years. R. Lemon

A 324 Movements in Contemporary Art [A]

A selected study of significant art works since World War II, stressing their interrelationship and the sociological trends which they represent. Prerequisite: Art 223. Alternate years. R. Lemon

A 325 Art of Spain [A]

The development of Spanish cultures reflected in architecture, sculpture, painting, and the minor arts is traced from cave painting to the 20th century. Emphasis is given to outside influences (Romans, Moors, etc.) and how they affected Spanish art. Alternate years. H. Hallam

A 331 Intermediate & Advanced Painting [A]

For advanced painting students — concentrating on a wider investigation of contemporary forms and the development of individual viewpoints. Individual and group critiques. Prerequisite: A 231 or consent. T. Peterson

A 340 Watercolor [A]

Studies in the handling of transparent watercolor, acrylic and tempera, treating still life, landscape, and the figure. Alternate years.

A 341 Design II [A]

An intermediate level design course. Emphasis is on strengthening design portfolios. Course work will consist of directed study with projects encouraging individual development. Prerequisite: A 222 or consent of instructor. R. Larned

A 342 Sculpture II [A]

Moves from a three-dimensional form into exploring different techniques, styles and materials, many not traditionally associated with sculpture, and a combination of perceptual and conceptual study of form. Prerequisite: A 241, A 242 and consent. R. Larned

A 343-443 The Human Figure [A]

A combined drawing and painting course for advanced students. Includes the study of anatomy — 3-dimensional studies in plastilina — and drawing and painting projects from figure and portrait models. Previous drawing and painting studies are required and consent of instructor. T. Peterson

A 352 Printmaking II [A]

Intermediate level intaglio printing. Emphasizes color techniques and development of individual uses of the intaglio medium. Some experimentation with lithography will be included. Prerequisite: A 252 or consent. T. Peterson

A 372 Printmaking III: Lithography [A]

For advanced students with adequate background in drawing, painting and printmaking. Prerequisite: four studio courses. T. Peterson

A 380 Special Categories in Art History

Surveys of selected areas of art history not encompassed by the departmental sequences of period courses. Now included are studies which divide the term between an exploration of the art of Turkey and the Art Nouveau and art deco style. Alternate years. H. Hallam

A 499 Senior Independent Study

•BIOLOGY

Small (Head), Coleman, Matthews, Richard, Sandstrom, Scheer

The Biology major provides a broadly based, balanced program that exposes the student to a wide variety of field, laboratory and classroom experiences fundamental to the life sciences. With this background some Rollins graduates in Biology have gone directly to positions in environmental laboratories, secondary school teaching, and industry. Many others have chosen to continue their education to obtain graduate or professional degrees in Botany, Biochemistry, Environmental Engineering, Forestry, Marine Biology, Medicine, Medical Technology, Nursing, Wildlife Management, Zoology or other biological sciences.

The requirements of the major are the satisfactory completion of 12 courses in Biology, three courses in Chemistry (Chemistry 120, 121, 220), and either Physics 107 or 201. Courses required within the Biology Department are: General Biology I (B 105), Plant Kingdom (B 234), Invertebrate-Vertebrate Zoology (B 236), Cellular and Developmental Biology (B260), Genetics (B308), Ecology (B316), either Plant Structure and function (B311), or Animal Physiology (B312) and Evolution (B462). At least six Biology courses must be taken at the 300-400 level. General Biology II (B106) is not required for the major but may be a valuable elective; required advanced courses cover the same material, but B106 may be useful as an introduction. Students are encouraged to take the opportunity to do an Independent Research (B 399/499) project in either the junior or senior year. Biology 110, 111, 112, 113, 114, and 115 are intended for students majoring in other fields and may not be counted toward the requirements for a major in Biology.

Because Biology is becoming increasingly integrated with mathematics, chemistry, and physics, students are encouraged to acquire as many skills as possible in these areas, as well as a reading knowledge of a foreign language. Several of the courses offered in Mathematics, including 109, 110, 111 and 120, are especially useful to biologists.

For students interested in preparing themselves for professional schools in health-related areas such as medicine, dentistry, pharmacy or medical technology, a thorough introduction to chemistry and physics is highly recommended. Such students are advised to take Physics 201 and 202, and Chemistry 221 in addition to the courses required for the Biology major. A student may petition the department to allow these courses to substitute for up to two of the elective Biology courses.

The requirements of the combined major in Biology and another department are the satisfactory completion of General Biology (B105 and B106) and six Biology and/or allied science courses approved by the Biology Department. Some possible combined majors are Biology/Chemistry, Biology/Mathematics, Biology/Physics, and Biology/Psychology.

Laboratory assistantships are available to students of demonstrated ability. These assistantships offer valuable practical experience and additional educational opportunities in addition to the financial benefits.

B 105/106 General Biology I and II [N]

A two term survey of modern biology for the science major. Topics included are cell structure and function, genetics, development, anatomy, physiology, diversity, ecology and evolution. Both terms are required for pre-medical students, but only B 105 is required of biology majors. With laboratory. Staff

B 110 Concepts in Biology [N]

A survey of current biological principles involved in the structure, function, development, ecology and evolution of principally higher plants and animals. A course providing the basic framework to allow individuals critically to integrate the impact of science on their lives and environment. Laboratory course for non-majors. Staff

B 111 Botany and Humanity [N]

A discourse on the biology of plants with emphasis on their impact and importance to people. General topics include the basics of plant structure and function, ecology, genetics, and evolution. Specific topics include poisonous, medicinal and hallucinogenic plants, the world food situation, and economic botany. Laboratory course for non-majors. P. Coleman

B 112 Biological Aspects of Nutrition [N]

A survey of the basic concepts of good nutrition from infancy to old age. Topics of discussion include obesity, heart disease, vegetarianism, digestion, metabolism, fetal development, and world food problems. Students will observe enzyme reactions, test for nutrients, use the metric system, and analyze foods qualitatively and quantitatively. Laboratory course for non-majors. E. Gregory

B 113 Economic Biology [N]

An investigation primarily of plants as they relate to humans. Topics of discussion include the nature of plants, plant and animal breeding, domestication, production, agribusiness, as well as world market demands and policies. Important plant and animal sources of food, beverage, drug, and industrial products are emphasized. Laboratory course for non-majors. P. Coleman

B 114 Foundations of Genetics/A Science for Society [N, Q]

A discourse on the field of genetics with emphasis on recent developments and their effects on society. A large portion of the course is devoted to the principles of heredity and to the nature of the gene. Special topics include genetics and disease, I.Q., genetic counseling, cancer, plant breeding, and recombinant DNA. Laboratory course for non-majors. P. Coleman

B 115 Oceanography [N]

A broad introduction to physical and chemical oceanography, submarine geology, and marine biology. Topics studied include the origin and evolution of oceanic waters and basins with special weighting given to plate tectonics, the movements of water, biogeochemical cycling, and technological means of exploration and recovery of resources afforded us from the oceans. Laboratory and field course for non-majors. E. Scheer

B 218/318 Sociobiology [N]

A study of social behavior in the animal kingdom. Sociology represents an important new synthesis area, closely allied to behavioral ecology and psychology, and drawing heavily on behavioral genetics, evolution, ethology, population biology, and neurophysiology. Major emphases include: (a) the evolution of social behavior, (b) the mechanisms of social behaviors: communication, aggression, spacing, dominance, social hierarchies, sex, and symbiosis, (c) the social species within the animal kingdom. For both majors and non-majors. With laboratory and field projects. D. Richard

B 234 Plant Kingdom [N]

Major emphasis is placed upon an evolutionary survey of protist, fungi and plant kingdoms. Topics include the origins and ordering of biological diversity, anatomy, morphology, and reproductive biology. With laboratory and field work. Prerequisite: B 105 or consent. Alternate years. E. Scheer

B 236 Invertebrate-Vertebrate Zoology [N]

A comprehensive study of the animal kingdom from the protozoa through the vertebrates. Emphasis is on the evolution and organization of animal diversity. Laboratory includes study of as much living material as possible and field studies of selected faunal groups from Central Florida and the Florida Keys. With Laboratory and field work. Prerequisite: B 105 or consent. D. Richard

B 260 Cellular and Developmental Biology [N]

Inquiry into the nature of cell function particularly as it relates to the development of cells, tissues, organs, and the organism. Emphases include descriptive and experimental approaches to the time-related phenomena of division, growth, differentiation, and morphogenesis. With laboratory. Prerequisite: C 220. Staff

B 308 Genetics [N, Q]

Analysis of molecular and Mendelian genetics as it applies to prokaryotic and eukaryotic organisms. Lectures and laboratories will cover such fields as molecular, cellular, developmental, Mendelian, and population genetics. A quantitative approach is emphasized, both in the presentation of concepts and genetic analysis. With laboratory. Prerequisite: B 105 or consent. Math 120 is recommended. P. Coleman

B 311 Plant Structure and Function [N]

A study of physiology and anatomy of higher plants. Topics include the plant cell, biochemistry, water relations, control systems, and physiological response. Plant-environment interactions are emphasized. Prerequisite: B 105 or consent. P. Coleman

B 312 Animal Physiology [N]

A study of the major processes relating to function of animals at both the cellular and organismic levels. Topics include the function of the nervous, muscular, endocrine, excretory, circulatory, respiratory, digestive, and reproductive systems. Emphasis is given to vertebrate, particularly mammalian, systems but aspects of lower vertebrate and invertebrate physiology are covered. With laboratory. Prerequisite: B 105 or consent. J. Small

B 316 Ecology [N]

A field-oriented course covering the fundamental processes and organization which characterize populations, communities, and ecosystems. Laboratory study emphasizes standard field methodology in the analysis of representative aquatic and terrestrial ecosystems of central and south Florida, including the Keys and Everglades regions. With laboratory. Prerequisite: B 234 or 236 or consent. C. Richard

B 323 Comparative Vertebrate Anatomy [N]

A comprehensive analysis of structure based on the study of the similarities and diversities of organ systems as found among the various major vertebrate organisms. The laboratory work consists of an in-depth analysis of the basic anatomical features

of the vertebrate body as revealed by dissection of dogfish shark or cat. With laboratory. Prerequisite B 105 or consent. C. Sandstrom

B 328 Vertebrate Embryology [N]

An analysis of the development of vertebrate embryos with emphasis on the mammal. A descriptive approach with the inclusion of experimental work where pertinent. Laboratory involves a comprehensive microscopic study of the chick and pig. With laboratory. Prerequisite: B 105 or consent. Staff

B 329 Microbiology [N]

An introduction to the biology of microorganisms examining how they grow, reproduce, and influence our lives. A section on immunology and disease is also included. The laboratory periods provide an opportunity to learn basic microbiological technique and to observe principles discussed in class. Prerequisite: B 105

B 340 Advanced Taxonomy [N]

Independent studies on the systematics of selected groups of organisms. Details are arranged with an instructor with special expertise in the group to be considered. With library, laboratory, and field exposure as necessary. Possible topics include:

Entomology
Aquatic Invertebrates
Malacology
Ichthyology
Herpetology
Ornithology
Mammalogy

Carcinology
Parasitology
Mycology
Phycology
Lower Vascular Plants
Higher Vascular Plants

B 351 Population Biology [N, Q]

A practical course on the methods of analysis of biological data. Topics covered include experimental design, use of statistics, random sampling, life tables, modeling, and population dynamics. Papers in several scientific journals are discussed to demonstrate quantitative methods. The laboratory involves independent projects and computer-based exercises. Although examples used are generally from population ecology, the techniques described are applicable to a wide variety of biological problems. Proficiency in algebra is a prerequisite for this course. With laboratory. Alternate years. P. Coleman and J. Small

B 391 Vertebrate Histology and Microtechnique [N]

Discussion of the structure and function of vertebrate cells and tissues in the laboratory environment. The course involves microscopic examination of selected tissues and the preparation of microscope slides. With laboratory. Prerequisite: B 105 or consent. Offered winter terms in alternate years. J. Small

B 394 Marine Biology: Directed Study [N]

An introduction to life in the sea. Directed field-oriented studies in the systematics, ecology, biogeography, and behavior of marine plankton, benthos, and nekton. Emphasis is placed on representative field areas of Florida coasts and the Caribbean. Conducted at the Bellairs Marine Research Institute (St. James, Barbados) and St. John, U.S. Virgin Islands. With laboratory. Prerequisite: B 105 or consent. Offered winter term in alternate years. D. Richard and J. Small

B 397 Tropical Biology: Directed Study [N]

Directed field-oriented studies in the systematics, ecology, biogeography, and behavior of terrestrial and aquatic organisms of the Tropics. Emphasis is given to representative ecosystems of Central America (e.g. lowland and mountain rain forests, mangroves, cloud forests, paramo). The course is conducted at the Smithsonian Tropical Research Institute on Barro Colorado Island in the Panama Canal Zone and at selected field locations in Costa Rica and Guatemala. With laboratory and field work. Prerequisite: B 105 or consent. Offered winter term in alternate years. D. Richard

B399/499 Biological Research: Independent Study

Research is carried out on a topic of student choice subject to approval by the Biology Department. Prerequisite: Junior/Senior standing and consent. Staff

B-C 431 Biochemistry I [N, Q]

Biochemistry 431 is designed as the first course of a two-term sequence introducing the principles of modern biochemistry. Emphasis is placed on the chemical nature of proteins, nucleic acids, lipids and carbohydrates; the functions of proteins; and the metabolic pathways related to the breakdown of carbohydrates. With laboratory. Prerequisite: C221. Biology Staff or E. Blossey

B-C 432 Biochemistry II [N, Q]

Intended to complete the introduction to biochemistry. Major topics include the metabolic degradation of fatty acids and amino acids; biosynthetic pathways for carbohydrates, lipids, amino acids and nucleotides; biochemical aspects of physiological processes and specialized tissues in higher organisms; and molecular biology of viral, prokaryotic and eukaryotic systems. With laboratory. Prerequisite: B-C 431. Biology Staff or E. Blossey

B 462 Evolution

A "capstone" seminar devoted to the most important unifying theme of biology. The prime emphasis is placed upon processes and mechanisms rather than the products of organic evolution. This course will cover new material as well as offer the student the opportunity to integrate knowledge accumulated in other courses within the major. Prerequisite: Senior standing. Staff

•CHEMISTRY

Ridgway (Head), Blossey, Coe, Hellwege

A major in chemistry provides the student with basic training for a professional career in chemistry and related areas of science. Many graduates continue their education in the various fields of chemistry, chemical physics, engineering, geochemistry, oceanography, and the sciences related to life, such as medicine, biochemistry, pharmacology, dentistry, etc., with support through fellowships and assistantships in graduate schools.

Students with a strong background in chemistry can prepare for careers in a variety of fields by complementing their chemical training with appropriate course work in the areas of education (secondary); computer science (chemical information and data systems analysis); law (patent work); economics (for sales, purchasing, and market research); library science (chemical librarian); systems engineering (for work in pollution control, urbanism, and ecology); and history, literature, and philosophy

(for literature research and technical editing).

Premedical students find that the courses required and strongly recommended by many medical schools can be advantageously met by a major in chemistry. The department recognizes this by allowing students to satisfy their major requirements with courses in physiology, biochemistry, molecular biology, comparative anatomy, and others beyond those required in the minimum basic program in chemistry. The newer trends in medical education are also complemented by the opportunities for independent studies in areas related to medicine.

Well-prepared students planning to major in chemistry should take Chemistry 120 and Mathematics 111 in the fall term and Chemistry 121 and Mathematics 112 during the spring term of the freshman year. Physics 201/202 may be taken during either the freshman or sophomore year. Students who have not had high school physics or those with deficiencies in mathematics normally should take Chemistry 107 and Mathematics 109 during the fall term and Physics 107 in the spring term of the freshman year. Chemistry 120 and/or Chemistry 121 may be exempted by satisfactory performance on department-administered examinations.

Beyond these, a minimum of nine additional courses and three elective courses in chemistry or related fields, on the 300 or 400-level, satisfy the requirements for a major in chemistry. Courses taken outside the Science Division will be accepted for satisfying the major requirements only if these have been approved by the Chemistry Department.

Normally, a student will take Chemistry 220, 221, 305, 306/307, 320, 380, 401, 480, 490, and elect two courses from Chemistry 400, 417, 431, 432 or 499, Independent Study. Chemistry 401, Inorganic Chemistry, and Chemistry 480/490, Senior Research, are required departmental courses for all seniors. As supporting courses outside the department, a chemistry major should take a minimum of two mathematics courses, one of which must be Mathematics 110 or 111 and the two-course sequence in Physics: Physics 201, 202. Additional courses in Mathematics (Mathematics 211/212) and Physics (Physics 203) are strongly recommended for students considering further study in chemistry.

Students who wish to emphasize biochemistry or pre-medicine are advised to include Biology 105, 106, and either 260 or 329, as well as Chemistry 431 and 432 in their study program.

Rollins College is included on the list of institutions approved by the American Chemical Society for undergraduate professional training in chemistry. To meet the requirements and certification formulated by the American Chemical Society for professional training as a chemist and for adequate preparation for graduate school, a student should take the following sequence of Chemistry courses: 120, 121, 220, 221, 305, 306 or 307, 320, 380, 401, 480, 490, and two courses from the following: Chemistry 400, 417, 431, 432 or 499, Independent Study.

The minimum requirements for a combined major in Chemistry and another department are the satisfactory completion of Chemistry 120, 121, 220, 221, 304 or 305, and two electives chosen from 380, 400, 401, 417, 431, 432, 460, 480, 490, or 499, Independent Study. An independent study or research project at the senior level (480, 490, 499) must be completed from one of the departments of the Division of Science and Mathematics.

C 105 Chemistry and Society — Applications and Issues [N]

Designed to show the important role chemistry plays in our day-to-day lives, this course examines subjects such as foods, wine making, photography, drugs, cosmetics, environmental problems and other topics of class interest. Designed for nonmajors, the use of mathematics is minimized and the level of presentation assumes no scientific background. With laboratory and field trips. Pozefsky

C 107 Concepts of Chemistry [N, Q]

A course for science majors introducing the basic concepts of chemistry and stressing quantitative and laboratory skills. Topics include chemical reactions, stoichiometry, atomic structure and chemical bonding, and reactions in aqueous solution. For students without a strong high school background in physical science and mathematics. With laboratory. Staff

ES-C 110 Chemistry and the Environment [N]

A brief introduction to some of the concepts and methods of chemistry and their applications to the study and solution of environmental problems. For non-science majors. No previous chemical knowledge on the part of the student is assumed. Laboratory exercises and field trips. Not offered 1979-1980. Staff

C 120 General Chemistry I [N, Q]

An introduction to chemistry for students planning to major in any of the laboratory sciences. Topics covered include: descriptive chemistry, stoichiometry, molecular kinetic theory, acid-base theory, atomic structure and periodicity, oxidation-reduction, and chemical bonding. With laboratory. Staff

C 121 General Chemistry II [N, Q]

Continuation of a one-year introduction to chemistry for science majors. Topics covered include: chemical thermodynamics, bonding in solids and liquids, phase equilibria, electrochemistry, coordination chemistry, and chemical kinetics. With laboratory. Prerequisite: C 120. Hellwege

C 198 Photography — The Meeting of Art and Science [N]

An introduction to the techniques, practice, and theory of photography. Topics covered will include: chemistry of films, film processing, lens systems, optics, camera types, color theory, color films, and color processing. The course assumes a background in high school chemistry and mathematics. With laboratory and dark-room practice. E. Blossey

C 220, 221 Organic Chemistry I and II [N]

Basic study of the most important types of carbon compounds: their preparation, interrelations, and properties. Introduction to instrumental methods used in the separation and identification of organic compounds such as gas chromatography, nuclear-magnetic resonance spectroscopy, infrared and ultraviolet spectroscopy, and mass spectroscopy. With laboratory. Prerequisite: C 121. E. Blossey or R. Ridgway

C 298 Darkroom Photography [N]

An intensive course designed to provide an understanding and manipulation of the basic chemistry involved in photographic solutions. The chemical and physical properties of both black and white and color developers, bleaches, toners, fixers, and films will be examined. A major portion of the course will be directed toward experience in the darkroom and chemical laboratory. The course requires prior knowledge of the darkroom and a basic understanding of chemistry. Offered Winter Term. E. Blossey

C 304 Physical Chemistry for the Life Sciences

A one-term introduction to physical chemistry emphasizing areas of interest to students in the life sciences. Topics include: the states of matter, thermodynamics,

phase and solution equilibria, electro-chemistry, chemical kinetics, and transport processes. Without laboratory. Prerequisites: C 121 and either Mathematics 110 or 111. Hellwege

C 305 Physical Chemistry I [N]

Kinetic molecular theory and thermodynamics. Introduction to the laws of thermodynamics as applied to chemical energetics, chemical and physical equilibria, and solutions of non-electrolytes. Elements of statistical thermodynamics. With laboratory. Prerequisite: C 121 and M 110 or 112. Staff

C 306 Physical Chemistry II [N]

Quantum Chemistry. Introduction to wavemechanics and its application to atomic orbital theory, molecular symmetry and bonding, spectroscopy and photochemistry. With laboratory. Offered in alternate years with C 307. Prerequisite: C 305 or consent. D. Coe or H. Hellwege

C 307 Physical Chemistry III [N]

Electrochemistry and chemical kinetics. Solutions of electrolytes, electrochemical cells. Kinetics of gas-phase reactions and of reactions in solution. With laboratory. Offered in alternate years with C 307. Prerequisite: C 305 or consent. D. Coe or H. Hellwege

C 320 Analytical Chemistry [N]

An introduction to the theory and methodology of analytical chemistry emphasizing solution equilibria and gravimetric, volumetric, oxidation-reduction, spectral and chromatographic methods of analysis. With laboratory. Prerequisite: C 121. Coe

C 380 Instrumental Analysis [N]

A laboratory course in the use of modern instrumentation to measure physical-chemical properties of molecules. Practical electronics, instrumental design and the interpretation of data are stressed. Prerequisites: C 221 and P 202. Staff

C 400 Advanced Analytical Chemistry [N]

A course dealing with advanced treatments of complex equilibria, electrochemistry, spectrophotometric analysis, and separation methods. With laboratory. Prerequisites: C 221, C 320, and 304 or 306 or 307. D. Coe or H. Hellwege

C 401 Inorganic Chemistry [N]

A systematic application of thermodynamics, kinetics, and theories of bonding to the chemistry of non-metal, transition metal, organo-metallic and bioinorganic compounds. With laboratory emphasizing the synthesis and characterization of a variety of inorganic compounds. Prerequisites: C 221, C 320 and 304 or 306 or 307 or consent. D. Coe or H. Hellwege

C 417 Advanced Organic Chemistry [N]

Modern interpretation of molecular structure and reactivity related by means of organic reaction mechanisms. Both lecture and laboratory will stress independent use of primary chemical literature. Prerequisite: C 221 and C 304 or 306 or 307. R. Ridgway or E. Blossey

B-C 431 Biochemistry I [N, Q]

Biochemistry 431 is designed as the first course of a two-term sequence introducing

the principles of modern biochemistry. Emphasis is placed on the chemical nature of proteins, nucleic acids, lipids and carbohydrates; the functions of proteins; and the metabolic pathways related to the breakdown of carbohydrates. With laboratory. Prerequisite: C 221. E. Blossy or Biology Staff

B-C 432 Biochemistry II [N, Q]

Intended to complete the introduction to biochemistry. Major topics include the metabolic degradation of fatty acids and amino acids; biosynthetic pathways for carbohydrates, lipids, amino acids and nucleotides; biochemical aspects of physiological processes and specialized tissues in higher organisms; and molecular biology of viral, prokaryotic and eukaryotic systems. With laboratory. Prerequisite: B-C 431. E. Blossy or Biology Staff

C 460 Topics in Chemistry

Advanced course in special topics which can include: polymers, stereochemistry, nuclear and radiation chemistry, phase relationships, inorganic synthesis, advanced electrochemical techniques, organometallics, photochemistry, natural products, special problems in chemical education, and current problems from the chemical literature. Team-taught by the staff. Course assumes the student has some prior knowledge of the four basic areas of chemistry. May be repeated for credit. Topics chosen by mutual consent of staff and student. Staff

C 480, 490 Senior Research I and II

Student research projects and chemical seminar. A proposal of the research to be conducted, two seminars and a paper describing the work are required in addition to the research. Staff

C 499 Independent Study

Research topics in Chemistry.

•**SPEECH/COMMUNICATION**

Planck (Head), Boyd, Rodgers

The study of Speech/Communication has been a part of the traditional academic curriculum since the years of ancient Greece. As society has evolved, the focus and scope of the discipline have broadened from a strict skills orientation to a multi-faceted probe of the areas directly involving verbal, non-verbal, interpersonal and mass communication ramifications. The past three decades have fostered rapid growth and expansion in this field in terms of personal, societal and cultural impact. Thus, Speech/Communication at Rollins College is conceived as a traditional field of study with contemporary applications.

The courses offered in this area stress the development of logical thought and decision-making processes, research skills, documented support for assertions and positions, creative thinking and expression, analysis of theories and positions, rhetorical criticism, values consideration and clarification, organizational skills, leadership techniques, verbal presentations in several forms, critical listening, and other related procedures desirable for a person well-educated in the liberal arts tradition.

Since Speech/Communication is a discipline underlying and complementing many areas of study, a student may select the field as one-half of a Combined Major. Combined Majors require the completion of eight courses as required by each of two different academic departments for a total of a sixteen course program. Such a Combined Major should have coherence and depth.

Such a choice would require that the student follow a sequenced curriculum of eight courses composed of:

- 2 Survey Courses (CM 130 and CM 330)
- 2 Performance Courses (CM 101 and CM 402 or CM 404)
- 1 Interactive Course (CM 202 or CM 306)
- 2 Theory Courses (CM 230 and CM 320)
- 1 Research Course (CM 498)

The approved sequence is to be distributed over a four-year period and ordered as follows:

- CM 101 Fundamentals of Speech
- CM 130 Elements of Communication
- CM 202 Interpersonal Communication or CM 306 Small Group Communication
- CM 230 Mass Communication: A Sociocultural Perspective
- CM 320 Theories of Persuasion
- CM 330 History of Radio and TV in America
- CM 402 Persuasive Communication or CM 404 Advanced Communication
- CM 498 Senior Seminar in Speech/Communication

CM 101 Fundamentals of Speech

This basic course offers consideration of the process of oral communication and the practice of skills associated with public speaking. The student will be expected to apply the process and skills in the preparation, delivery and evaluation of the common forms of public address. C. Planck/C. Rodgers

CM 130 Elements of Communication

This class provides the foundation for, and overview of, the field of Speech/Communication: theories, processes, implications of mass communication, oral presentations and interactive communication. The staff will team teach this course by integrating lectures, readings, guest speakers, films and student performances. The class is required of all Combined Majors prior to enrollment in a high level Speech/Communication course. Staff

CM 150 Writing for Mass Communications

Students will learn the principles of journalistic style in this writing course with a print media orientation. Basic theories, responsibilities, skills and activities will be stressed. Students will be expected to research and prepare several forms of news stories. Consent. Adjunct

CM 202 Interpersonal Communication

Course focuses on the nature of the communication process as it affects the individual's interaction with other people and groups. Involves study of communication theory, barriers, interactant behavior, situational cues, environmental factors, verbal and non-verbal messages. Subject approached via readings, discussion and in-class simulation exercises. Prerequisite: CM 130 or consent. C. Planck

CM 230 Mass Communications: A Sociocultural Perspective

The study of the dimension, scope and impact of mass communications upon the historical and future development of American society and culture. Major media will be explored through the readings and analysis of McLuhan, Schramm, Reston,

Bogart, Lasswell and Lippman. Lecture, discussion, film and guest speakers will be used to present the material. Prerequisite: CM 130 or Consent. L. Boyd

CM 303 Oral Interpretation of Literature

This course emphasizes the oral re-creation of literature for an audience. Principles and practices for selection, comprehension, analysis and appreciation of several types of literature will be stressed. C. Planck

CM 306 Small Group Communication

This course is designed to develop the attitudes, skills, and knowledge of methods favorable for effective participation within small groups and discussion and panel/symposium presentation. The course is usually designed to include a unit regarding both the study of career development by group process and resume preparation. Prerequisite: Junior or Senior status and Consent. C. Planck

CM 320 Theories of Persuasion

A study of the various theoretical viewpoints of persuasive communication as a decision-making process and *modus operandi* for a democratic society seeking non-violent means for resolving controversial and noncontroversial problems. Learning objectives include: development of a conceptual framework for understanding the psychodynamics of persuasive communications; awareness of competing theories and perspectives; sensitivity to its economic, societal and cultural dimensions; and consciousness of the ethical choices incumbent upon persuaders. Readings include Aristotle, Berlo, Minnick, Packard and Fromm. Lectures, debates, group dynamics, analyses of great speeches, advertisements, and political campaigns. Prerequisite: CM 130 and CM 230 or Consent. L. Boyd

CM 330 History of Radio and Television in America

A study of the development of broadcasting in America. The lecture course probes inventions, trends, programs, events and personalities that have contributed and advanced the electronic mass communications systems in the United States from 1900 to the present. C. Rodgers

CM 402 Persuasive Speaking

Students enrolled in CM 402 will analyze, design, present and evaluate persuasive speeches. There will be significant emphasis on the presentation of various types of persuasive speeches. The video recorder will be used extensively so students may evaluate their personal effectiveness. Prerequisites: CM 101, CM 330 and Senior Status or Consent. C. Planck

CM 404 Advanced Communication

This is a writing reinforcement course designed for the proficient speaker and writer. Students will prepare and deliver a minimum of 10-15 oral presentations. Emphasis is given to organization, content and delivery. Five research papers are required. Prerequisite: CM 101 and Senior Status or Consent. C. Rodgers

CM 498 Senior Seminar in Speech/Communication

A seminar course for senior Speech/Communication majors featuring development of research skills and tools, an extensive independent research effort within the field of Speech/Communication, and a formal presentation of the results of that research before a panel of peers and staff members. Required of senior majors. Staff

•ECONOMICS AND BUSINESS ADMINISTRATION

Schatz (Head), Currie, Dasse, Hales, Hepburn, Hill, Kenison, McCall, Taylor, Vincze, West

MAJOR IN ECONOMICS

The major in economics consists of a structured core of courses in Economics and additional upper level elective courses in Economics and Business Administration, a program which provides for balance between theoretical and applied economics.

Whether the student majors in Economics alone, or combines it with another field such as Science, preparation in college-level Economics is recognized as one of the strongest possible foundations either for direct entry into business or for further graduate study in Law, Public Administration, Foreign Affairs, Politics, Scientific Management, or other similar career fields.

The major in Economics comprises twelve (12) courses in Economics, in addition to Math 110. Math 110 should be taken prior to or concurrently with EC 211-212.

The standard group of required courses includes the following subjects:

Principles of Economics I (Macroeconomics)	EC 211
Principles of Economics II (Microeconomics)	EC 212
Statistical Inference <i>for the social sciences</i>	EC 221 BA 201
Intermediate Microeconomics	EC 303
Intermediate Macroeconomics	EC 304
Senior Economics Seminar	EC 401

History of Economic Thought
Alternative Economic Theories

In addition, ~~four~~ *five* courses must be selected from those Economics courses numbered 300/400.

The remaining two required departmental courses may be selected from either Business Administration or Economics courses after consultation and with the consent of the Dean. Elective courses in science, mathematics, history and public affairs or languages are useful to the well-motivated student of economics interested in methodology or special applications of economic analysis.

Proper sequencing of courses is an important part of both the Economics and Business Administration majors. Care must be taken in planning one's program before the junior year begins. Continuing consultation with the student's advisor is expected.

Students choosing a sequence of courses in preparation for entry into a graduate program in economics, business administration, or industrial management should consult with a member of the department concerning selection of courses.

EC 211 Principles of Economics I — Macroeconomics [S]

An introduction to the principles of economics that are useful in understanding major economic problems and policy alternatives. Methods of attempting to solve problems of unemployment, inflation, growth and similar topics. Introduction to national income analysis, American capitalism, and other factors in macroeconomic development. Lecture/discussion. Occasional papers. Appropriate for non-majors. Required for majors. Prerequisite or corequisite: M 110.

EC 212 Principles of Economics II — Microeconomics [S]

The development and application of basic tools of economic analysis. The determination of prices in markets. Resource allocation. The economics of consumer and

firm behavior. International economic relationships. Lecture/discussion, occasional papers. Appropriate for non-majors required for majors. Prerequisite: EC 211 or consent.

EC-H 245 Economic History of the United States [D]

This course will explore the evolution of American economic developments and institutions from the colonial period to the present. It will include an analysis of the impact of these developments and institutions on American social and political life. Critiques and/or research paper required. May be counted toward Economics or Business Administration major. Appropriate for non-majors. J. Lane

EC 303 Intermediate Microeconomic Theory

An elaboration of the basic principles of price theory as an analytic and predictive tool using graphic and mathematical analysis and techniques; market price analysis, product pricing and output, and resource pricing and output, and consumer demand. Prerequisite: EC 211, 212, BA 201. Research term paper and workshop.

EC 304 Intermediate Macroeconomic Theory

An intensive analysis of the behavior and relationship of the broad aggregates of economic activity, such as national income, the price and interest level, savings, investment, consumption, government expenditures, taxes, money, and credit. Consideration is given to economic fluctuations and factors influencing economic growth. Outside reading, research papers. Prerequisite: EC 211, 121, BA 201.

EC 306 Money and Banking

A study of the macroeconomic implication and impact of alternative monetary theories and policies. Special attention to interrelationship of monetary, fiscal and income policies on the performance of the economy. Lecture/discussion, term paper. Prerequisite: EC 211, 212.

EC 307 International Economics

An introduction to the theory and practice of international trade. A study of: the history, growth, importance, and patterns of world trade; international trade theory; tariffs and other protective policies; and the international monetary system. The course also includes a survey of international trade organizations and alliances. Open to non-majors. Prerequisites: EC 211, 212. Alternate years.

EC 327 Labor Economics

The determination of wages and employment levels, the supply and demand for labor. Trends in employment, problems of unemployment, the issues of wages, hours and working conditions, labor unions, labor disputes and methods of settlement, and the theory and practice of collective bargaining. Prerequisites: EC 211, 212, or consent. Alternate years.

EC 327 Comparative Economic Systems

The basic problems encountered by all economic systems, and the special problems of authoritarian, competitive and mixed economies. Prerequisites: EC 211, 212. Alternate years.

EC 332 Industrial Organization

This course studies the problems of control of industry performance in a mixed economy. The course includes a survey of (1) microeconomic theory; (2) economic

research in industry structure, conduct and performance and (3) antitrust litigation. Lectures/discussions/paper. Prerequisites: EC 212, BA 201. Open to non-majors.

EC 335 Public Finance

This course explores the impact of the taxing and spending policies of federal, state, and local governmental units on resource allocation in the economy. The incidence of taxation, the burden of public debt, the distribution of incomes, and the costs and benefits of public programs are a few of the topics that are covered. Prerequisites: EC 211, 212, Junior status. Alternate years.

EC-H 342 History of Economic Thought

An examination of the development of economic theory and analysis from the ancient Greeks to the present, but focusing on economic thought from the Physiocrats and Adam Smith to the Austrian School and J. M. Keynes. Lecture/discussion based on readings from the writings of the economists. Term paper examining the thought of a single economist will be required. Suitable for both History and Economics — Business Administration majors. Alternate years. B. Levis

EC 351 Economic Development [C]

Theory and empirical data related to changes in the level and structure of production and consumption of less developed areas of the world. Lecture/discussion. Several papers. Prerequisites: EC 211, 212. Alternate years.

EC-ES 355 Environmental Economics

Study of pollution control and resource management with emphasis on spatial distribution and on cost-benefit analysis of alternatives. Lecture/discussion. Several papers. Prerequisites: EC 211, 212, or consent. Alternate years.

EC 401 Senior Economics Seminar

An integrative seminar for economics majors to be taken in the senior year. Analysis and research of current major economic problems by applying economic concepts, the final results of which will include suggesting solutions. The research paper may cover, depending on the topic adopted, such areas as inflation, energy, environment, regional economic development, labor and unions, regulatory reform, and other economic issues. Prerequisites: Senior status, EC Core.

EC 499 Senior Independent Study

Seniors selecting an independent study are required to have consent of advisor, and advisor's and faculty sponsor's approval of areas and research methods.

MAJOR IN BUSINESS ADMINISTRATION

Rollins College offers to the undergraduate student a major in Business Administration leading to the Bachelor of Arts degree. In this program the student acquires both a broad foundation of work in basic Liberal Arts and Sciences and a concentrated Business Administration major. The major in Business Administration, like the major in Economics, provides essential preparation for either direct entry into business, industry, finance or for further graduate work in Business Administration, Economics, or related fields. The Business Administration major also develops the basis for specialization at the graduate level in such areas as Certified Public Accountancy, Statistics, Investments, Management, Marketing or areas such as Manufacturing, Transportation or Public Administration.

The undergraduate major in Business Administration requires the completion of twelve (12) courses, plus Mathematics 110, which must be taken prior to or concurrently with EC 211-212.

The core group of required courses includes the following subjects:

BA 201 Statistical Inference
 EC 211 Principles of Economics I (Macro)
 EC 212 Principles of Economics II (Micro)
 BA 225 Principles of Accounting I
 BA 226 Principles of Accounting II
 BA 336 Management Organization Theory
 BA 337 Principles of Marketing
 BA 338 Business Finance
 BA 401 Business Policy

In addition three courses must be selected from Economics or Business Administration after consultation and with the consent of the advisor.

Proper sequencing of courses is an important part of both the Economics and Business Administration majors. Care must be taken in planning one's program before the junior year begins. Continuing consultation with the student's advisor is expected.

BA 201 Statistical Inference [Q]

This course introduces the student to the role of statistics in the decision-making process. Emphasis is placed on business and economic applications. Topics covered include statistical description, probability theory, sampling techniques, hypotheses testing, regression analysis, and time series analysis. Lectures/discussions, paper. Prerequisites: EC 211, Math 110 or consent.

First year students planning to major in Business Administration may take Economics-History 245 — Economic History of the United States, as a course meeting major requirements, providing that it is taken prior to or concurrently with EC 211, 212.

BA 225 Principles of Accounting I

The theory, methods and use of accounting information in solving business problems. The development and role of accounting standards in economic and corporate decisions and behavior. Elements of Accounting. Offers an opportunity to learn the operation of a business firm. Requirements: Daily attendance and written assignments. Prerequisite: Sophomore status.

BA 226 Principles of Accounting II

A study of accounting reports in identifying issues, analysis of their sources, and applied solutions by use of accounting and economic data from management viewpoint. The effects of cost on prices, profits, revenues, asset values, capital asset decisions, and other financial policies are examined as to their impact on private business and the economy. The course offers an opportunity to learn the operation of basic financial control by management. Prerequisite: BA 225, Sophomore.

BA 314, 315 Intermediate Accounting I & II

A study in depth of the nature and uses of the accounting processes in financial statements. Working capital. Non-current assets and liability. Equity. Analytical processes. Depending upon feasible scheduling, this class will be offered in daytime or, if so indicated, in evening programs of the School for Continuing Education. Problem assignments; no term paper. Prerequisite: BA 225-226.

BA 322 Introduction to Legal Principles

An introductory course designed primarily for accounting concentration students.

An introduction to the philosophy of law; federal and state judicial systems emphasizing procedural rules relating to civil disputes. Legal liability, federal securities law, government regulation of business, and the law of contracts. Most of the term is devoted to an in-depth study of contract law. Lecture/discussion and case analysis. Mid-term and final exams. Junior status.

BA 323 Business Law

A course designed for the general business and other majors. Accounting concentration students should take a sequence of BA 322, 323. Agency, negotiable instruments, corporations, partnerships, bankruptcy, property, insurance, wills, estates and trusts. Lecture/discussion and case analysis. Mid-term and final exams. Junior status.

BA 336 Management Organization Theory

This course presents the basis of operational theory and science of management. The planning, organizing, staffing, directing/leading, and controlling functions of management are fully developed within the framework of a systems and contingency analysis of management. The interaction of management structure and human resources is reviewed in detail to show how effective management is accomplished in any given environment. Lecture/discussion, class participation, outside speakers. Several exams, book review, term paper. Prerequisites: Junior status, EC 211-212, BA 201, 225-226.

BA 337 Principles of Marketing

A discussion and analysis of marketing decisions involving interpreting market demand, designing products, establishing distribution channels, determining pricing policies, and creating promotional strategies. Lecture/discussion/case studies. Prerequisites: Junior status, EC 211-212, BA 201, 225-226.

BA 338 Business Finance

An introduction to the principles and techniques used by corporations in their financial management. An analysis of corporate financial structure, capital management, and long-term investment evaluations. Lecture/discussion/case studies. Prerequisites: Junior status, EC 211-212, BA 201, 225-226.

BA 340 Production Management

A study of the theory, methodology, and practice of production management. Subject matter includes a brief introduction to management theory, product planning, location and layout of plants, acquisition of inputs (including labor), equipment selection and replacement, inventories, design of the production process, production scheduling and control, quality and cost control, mathematical programming techniques, and economic analysis. Lecture/discussion/cases. Open to non-majors. Prerequisite: Math 110, BA 201. Alternate years.

BA 401 Business Policy

This course deals with overall management of the business enterprise. Case studies are utilized to observe the management function in a variety of organizations in different environments. It provides the student insight into the analysis function of top management and the policy formation activities at that level. Management personnel from area profit and not-for-profit organizations are brought into the classroom from time to time to present their views on the general subject of management. A research paper is required. Prerequisites: Senior status and BA Core.

BA 414, 415 Advanced Accounting I & II

Partnerships, combined corporate entities, consolidated statements, fiduciary accounting. Institutional and social accounting. Depending upon feasible scheduling, this class will be offered in daytime or, if so indicated, in evening programs. Prerequisites: BA 314, 315 or equivalent.

BA 434 Advertising Management

Analysis of situations in which advertising is an important component of management decisions about marketing plans. Topics include defining advertising's role in relation to total marketing efforts, selecting appropriate target audiences, utilizing communications principles in analyzing advertising messages and media, budgeting, pretesting, and measuring advertising effectiveness. Prerequisite: Junior, BA 337 or consent.

BA 436 Managerial Economics

The application of microeconomic analysis, quantitative methods, accounting methodology, and managerial processes to decision-making in organizations. Problems, case analysis, lecture/discussion, reports and/or term paper. Prerequisites: Junior status, EC 212, BA 201, 225-226 or consent.

•EDUCATION

Cotanche (Head), Giles, Kahn, McAleer, McCarthy, Morall, Russell, Schirrmacher, Shafe

The department of Education offers academic and field experiences in a liberal arts setting which prepare students to enter the teaching profession. Graduates of this state-approved Teacher Education Program are eligible for Florida State Teacher Certification, which is honored by 27 other states.

The department offers a major in Elementary Education. Students may take additional courses in the area of Early Childhood or Special Education to supplement this major. Students who wish to teach in secondary schools (grades 7-12) must complete a major in the intended teaching area along with the required professional courses offered through the Department of Education.

Students considering teaching as a career should obtain a copy of the Teacher Education Student Handbook available at the Department of Education Office. This Handbook contains all basic information for Education students. As soon as a student decides to seek Teacher Certification, he or she must file an Application for Admission to Teacher Education. This form is obtainable at the Department Office and is self-explanatory. The Director of Teacher Education will notify the student of action taken on the application, and will supply justification should the application be denied. A student must be admitted to Teacher Education before enrolling in the courses limited to majors and students seeking certification.

COURSE OF STUDY

Students seeking teacher certification, whether at the elementary or secondary levels, must complete: (1) professional courses, (2) specialization courses, (3) student teaching. Each of these areas is outlined below:

Professional courses [required of both elementary and secondary students]:

Social Foundations: ED 100, ED 271, AS-ED 342, PH 312 or ED 305
Psychological Foundations: ED 272, PY 238 or PY 221
ED 324: Curriculum and School Organization
ED 406 or ED 407 (according to level)

The foundation courses (ED 271 and ED 272 or their equivalents) are prerequisites for all 300 and 400 level Education courses. ED 406 or ED 407 are scheduled with Student Teaching.

Specialization Courses for Elementary Education Majors

Elementary Education Majors are required to take the following methods courses:

ED 317 Music for Elementary Schools
ED 318 Art for Elementary Schools
ED 361 Language Arts for Elementary Schools
ED 362 Mathematics for Elementary Schools
ED 363 Social Studies for Elementary Schools
ED 364 Science for Elementary Schools
ED 367 Health and Physical Education for Elementary Schools
ED 369 Children's Literature (or ED 316)
ED 409 Teaching of Reading

Some of these courses are paired with others and require concurrent registration. An Elementary Education major must plan his/her schedule carefully with his/her advisor to secure a proper course sequence and to allot time for field experience in conjunction with methods courses.

Specialization Courses for Secondary School Certification

In addition to the professional course requirements mentioned above, students who intend to teach in secondary schools (grades 7-12) must complete a major in their intended teaching area. Only the following majors are appropriate for secondary certification: Art, Biology, Chemistry, English, Foreign Languages, History, Mathematics, Music, Physics, and Theatre Arts. With proper course selection, a student majoring in any of the social or behavioral sciences may qualify for certification in Social Studies.

Secondary school students must also complete ED 417: Special Methods — Secondary School Subjects. Majors in Art or Music must be certified for grades K-12; therefore, they are also required to take the special methods courses in the subject area at the elementary level (either ED 318 or ED 317). In addition to their major advisor, students seeking secondary school certification should obtain academic advisement from the Head of the Department of Education.

Student Teaching

A teaching internship experience in the area in which the student is to be qualified is required of both the elementary education major and those obtaining secondary school certification. During the spring term of the junior year, students who have cumulative grade point averages of 6.0, as well as a cumulative average of 9.0 in the major, and who can show evidence that all subject prerequisites will be met before placement as a student teacher, may apply for admission to student teaching. The necessary forms are available at the Office of the Department of Education. These forms are filed with and reviewed by the Director of Student Teaching. Any student not approved for student teaching has the right of appeal to a Review Committee.

During the fall or spring terms of the senior year, after approval for student teaching, the student will enroll in either ED 490: Student Teaching — Elementary, or ED 491: Student Teaching — Secondary, as appropriate. This course is worth 15 credit hours (three course credits) and is graded on a Credit/No Credit basis. The student teaching experience entails placement as a full-time teacher for a ten-week period in an area school. It represents the culminating experience in the professional preparation of teachers.

Supplementary Courses in Education

By taking additional courses in the areas of Early Childhood or Exceptional Child Education, elementary education majors may be certified in these areas as well.

ED 100 Contemporary Issues in Education [S]

An introductory course covering such current issues as: contemporary school organization and finance, problems of teaching, alternative schools, curriculum development, local control of education, and contemporary policy controversies. The course uses a lecture/discussion format, and requires a position paper on a given educational issue. Freshmen ONLY. Appropriate for non-majors, this course satisfies the social foundations requirement for teacher certification. J. McCarthy

ED 250 Group Dynamics

This course will focus upon the interrelationships of group members; group roles, procedures and goals; self-exploration and feedback. The course will include consideration of such group factors as leadership styles, group climates, size and process, the types of groups and group functioning. The format of the course includes both didactic and experimental activities with the emphasis upon the experimental (group functioning, role playing, demonstrations, group problem-solving, etc.). M. Shafe

ED 271 School and Society [S]

An examination of the institution of the school in its social context. Sociological techniques are used to study the changing role of the teacher, the social effects of schooling, and the school as a miniature society. This course includes a variety of in-school experiences. Satisfies the social foundations requirement for teacher certification. Not offered during 1979-80. M. Kahn

ED 272 Educational Psychology

An application of psychological concepts to children and adolescents in school situations. The purpose of the course is to assist prospective teachers to acquire an understanding of child development, the processes of learning, evaluation and assessment, as well as the psychology of teaching. Motivation, perception, personality, intelligence, and learning are central concepts. A research paper, in-class projects, and review of current educational research are required. This course meets the psychological foundations requirement. Majors or consent. D. Cotanche

ED 274 Communicative Behavior in Human Interactions

This course focuses upon the interpersonal skills essential for relating to others. Particular emphasis is placed upon verbal and non-verbal behavior, implicit and explicit communication, development of assertive communication skills, conflict resolution and stress management skills. M. Shafe

ED 296 Human Relations: Interpersonal Effectiveness

This course is designed to assist individuals in developing more effective verbal and

non-verbal communication skills in interpersonal transactions. A course goal will be self-understanding while developing group communication skills. Participants will be requested to examine their attitudes, perceptions, risk-taking and values. The didactic and experiential learning experiences will include mini-lectures, demonstrations, small group work, role playing, practice, and activity development. Students will be evaluated on the basis of reaction papers, exams, class attendance and participation, and activity development. M. Shafe

ED 302 Early Childhood Education I

A study of the development of the child from infancy to the early primary years, the theoretical foundations of Early Childhood Education, and the history, philosophy, and achievements of schools for young children. Observation and participation in pre-schools is included.

ED 303 Early Childhood Education II

A study of methods, materials and curriculum for teaching young children (N-3). Participation in Early Childhood Education settings is required. Prerequisites: ED 302. ED 302 and 303 entitle an Elementary Education major to certification in Early Childhood Education.

ED-H 305 History of Education [D]

An interpretative survey of the role education has played in Western society with an emphasis on an historical analysis of the development of American education in the context of the nation's social and intellectual history. 3-4 paperback textbooks; critiques and/or research paper. J. Lane

ED 316 Instructional Materials

This course deals with the selection, evaluation, and use of instructional materials. Maps, films, reference works, newspapers, television programs, other audio/visual aids, traditional and recent children's literature, and textbooks are among such materials. This course may be used in lieu of ED 369 by elementary education majors. N. McAleer.

ED 317 Music for Elementary Schools

An introduction to basic concepts, literature, and procedures for teaching music in the elementary grades. Both vocal and instrumental music are covered. This course is limited to those seeking certification in elementary education or music. W. Gallo

ED 318 Art for Elementary Schools

This course constitutes a study of the fundamental concepts, materials, and methods for teaching art in the elementary grades. The course is organized as a workshop: concepts of color and design are illustrated through the use of a variety of media appropriate for the elementary school child. This course is limited to those seeking certification in elementary education or art.

ED 324 Curriculum and School Organization

A study of curriculum planning and school organization for both elementary and secondary schools. Course requirements include: reading cards, book reports, oral presentations, and in-school visitation. This course is required of all students seeking certification, regardless of level. Enrollment is limited to those who have been admitted to Teacher Education. N. McAleer.

AS—ED 342 Sociology of Education [5]

The role of the school in providing certain important functions is examined, with particular emphasis on political and economic dimensions. The internal structure of American education is analyzed using sociological concepts with a stress on conflict and change. Student papers and presentations. Small discussion groups, films and TV tapes. Appropriate for non-majors. A. Jones/J. Weiss

ED 351 Introduction to Special Education: The Exceptional Child

Intended as a survey course. This course will introduce the undergraduate students to those children who have been classified exceptional. It will cover the various theories of exceptionality; characteristics, causes, diagnostic instruments, and home and school programs as well as special teaching methods and mainstreaming ideas for the exceptional child. The course will be taught lecture/discussion. Students will be expected to visit area schools for the exceptional child, as well as complete four mini-papers dealing with a choice of subjects on exceptionality. M. Kahn

ED 361 Language Arts for Elementary Schools

A study of language arts programs in the elementary schools. Provides students with the skills needed to teach manuscript and cursive writing, listening techniques, developmental speech, traditional, descriptive, and transformational grammar, and creative and formal composition. This course is blocked with ED 363 and requires concurrent registration. Prerequisite: Sophomore Elementary Education Major. N. McAleer

ED 362 Mathematics for Elementary Schools

A study of methods for teaching mathematics in the Elementary School. A workshop approach emphasizing manipulative materials. Competency in computational skills is assumed. Prerequisite: Sophomore Major. This course is blocked with ED 364 and requires concurrent registration. N. McAleer

ED 363 Social Studies for Elementary Schools

A study of traditional and recent elementary school Social Studies approaches, examining the content materials, and evaluation techniques used in today's schools. Emphasizes the organization and presentation of units of study in social science. This course is blocked with ED 361 and requires concurrent registration. Prerequisite: Sophomore Major. N. McAleer

ED 364 Science for Elementary Schools

A study of the major concepts of science taught in the elementary school and the methods employed to achieve the objectives of elementary science curricula. Emphasis is placed on the development of skills of scientific inquiry; the course is conducted in a laboratory setting and is team-taught with ED 362 in which students must enroll concurrently. Prerequisite: Sophomore Major. E. Giles

ED 367 Health and Physical Education for Elementary Schools

An examination of principles of health education, the methods of organizing and conducting physical education programs in elementary schools, and materials appropriate to health and physical education. Prerequisite: Major. V. Mack

ED 369 Children's Literature

A study of the literature for children and its educational value in the elementary school curriculum. Special topics include: themes in children's literature, both past and present, genres of children's literature, sexism in children's literature, and techni-

ques for the evaluation of children's literature. Course requirements include the extensive reading of juvenile literature and the preparation of materials for use in the classroom. Prerequisite: Junior Major. N. McAleer

ED 406 Teaching and Learning in Elementary Schools

This seminar course taken only by student teachers, involves intensive preparation for the student teaching experience. Emphasis of the course will include humanistic techniques for teaching in the elementary school, summarized testing, and classroom management techniques. There will be daily assignments that will be coordinated with Phase I of the Student Teaching program. M. Kahn

ED 407 Teaching and Learning in Secondary Schools

An advanced seminar studying the principles and methods of teaching and learning for secondary school teachers. This course is taken along with Student Teaching and provides an intensive preparation for that experience. Prerequisite: Senior seeking secondary certification. D. Cotanche

ED 409 Teaching of Reading in the Elementary School

Study of various approaches to teaching beginning reading, word recognition and study skills comprehension. Class assignments will include testing and tutoring children in the elementary grades plus presenting mini-lessons in reading, creating an activity file, and group projects. This course will lead to certification in Elementary Education and is a requirement for the major in Education. It will be taught lecture/discussion. M. Kahn

ED 410 Individualizing Instruction: Packaging the Learning Activity

The preparation of learning activities in the cognitive, affective, and psychomotor domains for individualizing instruction; the study of curriculum guides in current use and the developmental nature of learners. Students are required to construct sequential learning packages. Prerequisite: Sophomore Major. Not offered during 1979-80.

ED 417 Special Methods — Secondary School Subjects

This is a seminar on methods of teaching secondary school subjects. Special topics include: selection, evaluation, and use of instructional materials; problems of teaching reading in the content area; adapting the college major to the secondary school setting. This course is required of all students seeking secondary school certification. Prerequisite: Senior Major. D. Cotanche

ED 490 Student Teaching — Elementary

A full-term student teaching internship including campus classwork, visitations to selected area schools and full-time teaching experience in local schools under the direction of a cooperating master teacher. This course is intended to provide a practical setting in which the student may integrate and apply the skills and knowledge acquired during the previous Teacher Education courses. ED 490 is worth three course credits (15 quarter hours). It is graded on a Credit/No Credit basis. Prerequisite: Senior Major or Senior seeking secondary certification. M. Kahn/E. Giles

ED 491 Student Teaching — Secondary

See course description for ED 490, with appropriate substitutions for teaching level. M. Kahn/E. Giles

Students wishing to student teach must possess a B average (9.0) in all major and teacher certification courses. This rule will take effect Fall 1980.

•ENGLISH

Ser (Head), Carson, Cohen, Curb, Hamilton, MacKenzie, Nordstrom, O'Sullivan, Pastore, Phelan

English is a good major to prepare one for law school and medical school. In answer to the question, "Is it ordinarily possible for a college undergraduate both to meet your entrance requirements and complete an English major?" all 45 law schools and 31 medical schools canvassed by the Modern Language Association answered, "yes."

English is also a good major for those who intend to go into the business world. Applicants with a college English background are hired by industry to fill positions in two broad categories. The first utilizes this background for editing, technical writing, advertising, and other similar functions. The other uses the education as an adjunct to the performance of duties in such areas as sales, marketing, and personnel management, positions that require logical thinking and facility in exact communication rather than a specific set of learned skills. An English Major has numerous opportunities to work for the United States Government, this nation's largest employer. A spokesman for the Department of the Navy said, "The number of specific jobs within this Department which are susceptible to entry with a background in English . . . is too numerous either to catalogue or describe."

For more specific information about these applications, as well as numerous others, ask anyone in the English Department to let you see a copy of "English — The Pre-Professional Major."

Students majoring in English should complete the following courses and studies, choosing electives to suit their educational goals in consultation with their advisor:

English 201, 202, and 203 (Sophomore year)

English 303, 304 (Junior year)

Three courses in English literature before 1900

Three electives beyond the 100-level — selected from any offerings of the English Department; with the advisor's approval, literature and language offerings from other departments may partially fulfill this requirement.

Independent study (Senior year)

Through its selected studies courses (221-2, 261, 275, 306, 307, 308) the English Department tries to fulfill the direct needs of its majors, offering courses in specific genres or major figures (such as Gothic literature, John Milton, and Geoffrey Chaucer).

E 101 Freshman Rhetoric and Composition [W]

Gives both examples of and practice in the kinds of writing students are expected to do in college. The final grade is determined by the student's demonstrated writing proficiency. Required of students who score below 600 on the English Achievement Test.

E 150 Introduction to Literature [L]

Designed to introduce students to the structure, characteristics, and socio-cultural significance of literature. May be oriented according to genres or themes. Intended primarily for non-majors. May be repeated for credit.

E 201, 202 Major English Writings, I & II [L]

A critical and historical approach, covering writers of the Medieval and Renaissance periods, including: the *Beowulf* poet, Chaucer, Spenser, Donne, Jonson, Milton and Bacon. 202 covers eighteenth and nineteenth-century writers, including: Pope, Swift, Johnson, Wordsworth, Coleridge, Shelley, Keats, Tennyson, Browning and Arnold. Required of English majors in the sophomore year. Lecture/discussion, papers.

E 203 Introduction to Literary Study [L]

A course designed to acquaint the student with the principal critical approaches to literature and with the major concepts, methods, and research tools essential to the study of literature. Required of English majors in the sophomore year; taken in conjunction with either English 201 or 202. Several papers required.

E 205 The English Language

Study of modern written and spoken language as affected by changes in pronunciation, forms, sentence structures, meanings, and idiom dictated by either convention or usage at all levels. No prerequisite; designed for both majors and non-majors; Freshman through senior years. Strongly recommended for future teachers. Phelan, Cohen

E 221, 222 Selected Studies in World Literature [L]

Topics may include: the Bible, mythology, the epic, the international folk tale, Greek and Roman literature, movements in European literature from the Renaissance through Existentialism. May be repeated for credit. A. Nordstrom/S. Phelan

E 261 Selected Studies in Film [A]

Film studies, varied from year to year as to genre and content. The focus of the course will be on history, aesthetics, or the relationship of film to literature. Appropriate for non-majors. C. Ser

E 264 Twentieth-Century Drama: British and American [A]

From Barrie to Albee. Freshman through senior years. Lectures, discussion, listening to recordings, reports. R. Curb

E 275 Selected Studies in Minority Literature [L, C]

Minority literary studies, varied from year to year. Examples of offerings: contemporary Black literature, survey of Black literature, sociology of literature, Jewish literature and women's literature. May be repeated for credit. Appropriate for non-majors. M. O'Sullivan/J. West/Curb/Ser

E 301 Restoration and Eighteenth Century [L]

A study of the literature and critical thought of British writers from Dryden to Burns. Special attention is given to Dryden, Pope, Swift, Goldsmith, and Johnson. Junior and senior years. Appropriate for non-majors. M. O'Sullivan

E 303, 304 American Literature [L]

A critical, historical study of the forms and ideas shaping and produced by major American authors. Fall: Hawthorne, Emerson, Thoreau, Poe, Melville, Whitman, Dickinson. Spring: James, Crane, Fitzgerald, Frost, Hemingway, Faulkner. Oral reports and/or analytical papers. Prerequisite: Sophomore status. P. Pastore/B. Carson

E 306, 307 Selected Studies in American Literature [L]

American literary studies, varied from year to year as to authors, genres, or historical and cultural movements. Sophomore, junior, senior years. May be repeated for credit.

E 308 Selected Studies in British Literature [L]

English literary studies, varied from year to year as to authors, themes, genres, or historical and cultural movements. Sophomores, juniors, seniors. May be repeated for credit.

E 310 Selected Studies in Language

Specialized approaches to language: semantics and literature, linguistics, rhetoric, advanced grammar. Varies from year to year. Juniors and seniors. May be repeated for credit if a different topic is taken.

E 313 Southern Writers [L]

A study of selected Southern writers, including novelists, short story writers, and poets. Sophomore, junior, senior years. P. Pastore

E 317, 318 Shakespeare [A]

A study of the major plays and sonnets. Both courses include comedies, tragedies, and histories. 317 covers the early plays; 318, the later. The class will give close attention to literal, poetic, philosophical and dramatic meanings of the plays, reading aloud, acting out, and hearing professional recordings of them. Ample opportunity to express personal responses both in writing and discussions. Appropriate for non-majors. A. Nordstrom/staff

E 332 English Literature: Romantic Period [L]

A study of the literature and the critical thought of the English Romantic Movement, with special emphasis on the poetry of Wordsworth, Coleridge, Byron, Keats, and Shelley. Junior, senior years. E. Cohen

E 333 Victorian Poetry and Prose [L]

Focuses upon the themes and styles of the major Victorian poets and essayists, such as Carlyle, Tennyson, Browning, Ruskin and Arnold. The literary works will also be evaluated against the backdrop of Victorian culture and counter-culture. Students may expect to engage in discussions of English, art, science, philosophy and politics from 1830-1900. Paper. E. Cohen/C. Ser

E 363 Twentieth-Century Drama: European [A]

From Ibsen to Ionesco. Lecture/discussion; listening to records and written reports. Appropriate for non-majors. R. Curb

E 365 Twentieth-Century English Novel [L]

An intensive study of eight novels by such authors as Joyce, Lawrence, Spark and Virginia Woolf. There will be an examination on each of the novels, of which the student must select four. Comprehensive final. E. Cohen

E 366 Twentieth-Century British and American Poetry [L]

A study of British and American poets of the twentieth century, with emphasis upon the major poets. Seminar structure, papers, final. Sophomore, junior, senior years. Freshman by consent. Alternate years. J. West/E. Cohen

E 367, 369 Creative Writing [A]

A course in creative writing, conducted on the workshop plan. Reading and criticism of manuscripts that are written outside of class. Freshman through senior years by consent. May be repeated for credit. J. West

E 370 The Twentieth-Century Novel in America [L]

A study of selected novels by major American writers which reflect the social and anti-social trends prevalent in America from 1900 to the 1950s. Novelists to be considered: Dreiser, DosPassos, Hemingway, Lewis, Faulkner, Fitzgerald, Steinbeck, Robert Penn Warren and others. Paper and oral report. Prerequisite: Upperclass status. P. Pastore/B. Carson

E 390 Expository Writing [R]

Assumes basic competency in conventional syntax, mechanics and organization, as learned in freshman composition. Attention about equally divided between the kinds of advanced writing done in classes and writing expected after graduation. A major objective is to develop, improve and make more flexible the techniques of writing. Unidentified student compositions, written for the class, will be examined so benefit can be had from peer evaluation. Prerequisite: Upperclass status or by consent. May be repeated for credit if a different section is taken.

E 390A Expository Writing for Science Majors [R]

Provides students with an opportunity to gain proficiency in advancing theses and organizing ideas. An essay on a scientific topic will be due every two weeks, with a minimum of three drafts submitted for evaluation in the interim. Prerequisite: Upperclass status. E. Cohen

E 390B Expository Writing: Business Communications [R]

Communication in business: Letter writing, technical report writing, preparation of speeches. C. Ser

E 455, 456 English Novel, I & II [L]

A discussion-oriented study of the development of the English novel. 455 covers novels by Richardson, Defoe, Fielding, Smollett and Sterne. 456 covers Scott through Hardy. Term paper. Prerequisite: junior status. Alternate years. C. Ser/M. O'Sullivan

E 481 Modern European Novel [L]

A study of the development of contemporary fiction in Europe. Representative authors such as, Flaubert, Dostoevsky, Tolstoy, Hesse, Kafka, and Camus. Sophomores, Juniors, Seniors. C. Ser/S. Phelan

E 399/499 Independent Study

•ENVIRONMENTAL STUDIES

William M. Partington, Jr., Coordinator

The Environmental Studies major is an interdisciplinary program dedicated to the study of natural and cultural environments essential to the quality of life on earth.

This major offers a common core of courses that will accomplish two fundamental objectives. The first is to provide a sound basis of knowledge which will enable the

student to analyze and recommend actions on environmental issues, problems, and opportunities. Second, this major provides either for more extensive course work across a number of disciplines ("breadth"), or for more intensive course work within one discipline ("concentration").

Because of its ability to be tailored to a student's individual needs, the Environmental Studies major can provide the student with (1) preparation for a career in environmentally related areas of concern; (2) a broad background in several related areas of study in the tradition of a liberal arts education; (3) some concentration in a particular discipline combined with the environmental major; (4) a basis for further study on the graduate level.

The vocational possibilities of this major include, but are not limited to, business and management, social or civil services, legal or political areas (using the major as a pre-law curriculum), work with public interest organizations, teaching and/or research, and environmental planning.

An important aspect of this major is the exposure to and involvement in real environmental problems that exist beyond the campus. Florida has been in the forefront of environmental issues in recent years and has been a pioneer in attempted solutions. Therefore, the field experiences and guest lecturers associated with this major give this Rollins College program a unique advantage for environmental studies.

An adviser should be selected who is associated with the Environmental Studies program. On occasion, courses especially relevant to the program may be available on campus, and those may be substituted for non-core courses.

I. Graduation requirements are met by taking 16 courses relating to the major and approved by the adviser. Eight core courses are required:

- ES 189 Introduction to Environmental Studies
- ES 191 Environmental Studies — Natural Sciences
- ES 192 Environmental Studies — Social Sciences
- ES 216 Ecology
- ES-PH 289 Ethics and the Environment
- ES 389 Environmental Impact Statements
- ES 489 Environmental Planning
- ES 499 Environmental Research

II. In addition, a minimum of four courses must be selected from the following. This includes 2 courses from the natural sciences and 2 from social sciences; only one course may be selected from those groups which are bracketed, in order to meet this requirement.

Natural Sciences:

- G 150 Geology
- ES-G 294 Environmental Geology
- GY 140 Introduction to Geography

- ES-SC 110 A Discovery Approach to Physical Science
- ES-SC 120 Energy: A Discovery Approach
- P 107 Concepts of Physics

- C 107 Concepts of Chemistry
- ES-C 110 Chemistry and the Environment

- B 105 General Biology I
- B 106 General Biology II

Social Sciences:

- ES-AS 275 Population
- AS-318 Urban Sociology

- AS 320 Social Change and the Future
- AS 355 Dynamics of Socio-Cultural Change

- ES-EC 355 Environmental Economics (by consent)
- PO 160U Introduction to Politics: American
- ES-PO 362U Environmental Politics

III. After meeting the above requirements of 12 courses for the environmental studies major, the student may choose either to take 4 other courses from Section II for added breadth, or the student may concentrate in Biology, Chemistry, Economics, Political Science, or Sociology/Anthropology. Those courses listed under Section II are also available for concentration.

Biology:

- B 218/318 Sociobiology
- B 234 Plant Kingdom
- B 236 Invertebrate-Vertebrate Zoology
- B 308 Genetics
- B 311 Plant Structure and Function
- B 312 Animal Physiology
- B 329 Microbiology
- B 351 Population Biology
- B 394 Marine Biology
- B 397 Tropical Biology
- B 462 Evolution

Chemistry:

- C 120 General Chemistry I
- C 121 General Chemistry II
- C 220 Organic Chemistry I
- C 221 Organic Chemistry II
- C 304 Physical Chemistry for the Life Sciences

(Environmental Studies majors concentrating in Chemistry will take all five courses in this section and will omit ES 499.)

Economics:

- EC 211 Macroeconomics
- BA 201 Statistical Inference
- EC 303 Intermediate Macroeconomics
- EC 304 Intermediate Microeconomics

Political Science:

- PO 130I Introduction to Politics: International
- PO 132I World Issues of Our Times

PO 331I World Politics and International Economics
PO 371U Parties, Public Opinion, and Pressure Groups
H-PO 392T Development of American Political Culture

Sociology/Anthropology:

AS 243 Social Stratification

ES-AS 380B Seminar on Culture and the Environment

(Other courses may be negotiated with the advisor.)

With proper curriculum planning, senior majors may be able to have a full-time internship in an environmentally related agency or organization during the summer, fall, winter or spring term of the senior year. Federal, state, and local levels provide such internship opportunities. Examples of co-operating agencies and organizations include the Environmental Information Center, the Florida Department of Environmental Regulation, the Florida Audubon Society, Orange County (Environmental) Health Department, Mote Marine Research Laboratory, and the Nature Conservancy. In addition to applied practical experience prior to graduation, the internship can often lead to specific career opportunities.

ES-C 110 Chemistry and the Environment

See description under Chemistry listing.

ES-SC 120 Energy: A Discovery Approach

See description under Science listings.

ES 189 Introduction to Environmental Studies [S]

An interdisciplinary approach to the major problems facing environmental studies. Emphases are placed upon defining the problems of critical concern and then developing the conceptual and methodological tools to be applied to such topics as energy, food, population, resources, standards and urbanization. This course will include Environmental Studies faculty from departments of Economics, Natural Sciences, Political Science, and Anthropology/Sociology. Required of all Environmental Studies majors, but also appropriate for non-majors. W. Partington

ES 191 Environmental Studies — Natural Science [N]

An introduction to the impacts caused by man operating within ecosystems from a natural science perspective. Topics to be covered include: matter, energy, ecological and technological systems, population, pollution, etc. Physical and biological principles will be identified and applied to the rational management and conservation of geologically finite non-renewable as well as renewable biological resources. With laboratory and field work. Staff

ES 192 Environmental Studies — Social Science

This course develops many of the concepts and principles deriving from the social sciences that are relevant to the analysis of environmental issues and concerns. Environmentally related problems and case studies are used to facilitate the analysis. K. Taylor

ES 216 Ecology [N]

A field oriented course covering the fundamental processes and organization which characterize populations, communities, and ecosystems. Laboratory-field study emphasizes standard field methodology in the analysis of representative aquatic and

terrestrial ecosystems of central and south Florida, including the Keys and Everglades region. With laboratory. Prerequisite: ES 191. D. Richard

ES-PH 289 Ethics and the Environment. [S]

Using a general systems approach, this course will explore the interrelationships between people's basic guiding values, the use of the earth's resources, and the possibilities for human survival. Reviews the current "storm of crises" confronting humankind (population, food, energy and pollution), and what technologically possible solutions are available; seeks to discover what kinds of actions ought to be done, what kinds of attitudes ought to be promoted, and how people — including ourselves — might be motivated to do what is right. Offered spring 1981. K. Peters

ES 389 Environmental Impact Statements

Based upon an exposure to the highly significant and broadly ranging implications of the National Environmental Policy Act (NEPA), the subsequent guidelines for the preparation of Environmental Impact Statements (EIS) of the Council on Environmental Quality and other appropriate readings, students will apply this knowledge to the analysis and class presentation of an EIS. Individual conferences will help prepare the student in meeting this requirement which is an exercise in applying the law and sharpening abilities to integrate knowledge from different disciplines. The course concludes with small teams of students, in conference with the instructor, generating a detailed outline of an EIS of their choice that will demonstrate their understanding of the letter and spirit of NEPA and the Guidelines. E. Scheer

ES 489 Environmental Planning

An interdisciplinary approach to the rational and humanistic planning of future environments with a focus on growth in Central Florida. Natural and human resources, rural and urban environments, social, political, technological and economic factors will be considered in the continuing construction of alternate regional models with emphasis on the optimally distributed high quality of life. Required of environmental majors in senior year. Prerequisite: ES 189 and either ES 289 or 389. T. Harblin

ES 399, 499 IS Environmental Research

Field and problem-oriented independent research topics will be selected in the area of specialty. Prerequisites: sophomore or preferably junior standing for ES 399; senior standing for ES 499 which is a requirement of majors in their area of concentration. Consent of advisor for ES 499.

•EXPERIMENTAL COURSES

EX 016 Humanities: The Four Ages of Man

A study of art, architecture, literature, music, and philosophy in Classical Greece, Medieval France, Renaissance Italy, and Victorian England. There will be one test on each period and a final examination. Edge and Ser

•FOREIGN LANGUAGES

(FRENCH, GERMAN, ITALIAN, RUSSIAN, SPANISH, STUDY ABROAD)

Bonnell (Head), Borsoi, Danowitz, Lancaster, Miller, Sedwick, Stadt

The department serves the needs of those who wish to achieve a knowledge of a given language, its literature, and its culture, or — on a more advanced level — those who plan to teach, who anticipate graduate study and research, or who are preparing to use the language as an important second skill in various professional fields.

Three programs of study are recognized. A student may major, or specialize, in one language (French, German, or Spanish), by completing 10 courses on the 200-, 300-, and 400-level of that language, plus courses through 201, or its equivalent, in a second language, or courses through 102, or its equivalent, in two other languages. A Combined Major (specialization in one language combined with a major in another department) requires 8 courses at the 200-, 300-, and 400-level in one language. FL 381 may be counted as one of the language courses required for a major, combined language major or a combined major.

Placement of Freshmen: Students who have taken the College Entrance Examination Board Achievement Test in a foreign language and have received a score of 550 or higher may elect a 300-level course in the language, if they so choose.

ALL FOREIGN LANGUAGES

FL 381 Introduction to Language

Open to all students. An introduction to the many facets of language. It aims to provide a basic understanding of how language is "put together" as well as how it develops and changes. Taught in English. E. Borsoi

Prefix determined by language taken: French (FR), German (GN), Italian (IT), Russian (RN), Spanish (SH).

101, 102 [F] Elementary French, German, Italian, Russian or Spanish

Grammar, readings, cultural material, maximum of oral practice, laboratory. Prerequisite for 102: 101 or one year of the same foreign language in high school.

201 Intermediate French, German, Italian, Russian or Spanish [C]

Reading, writing, speaking, grammar review, laboratory. This is for those who have either completed the 102 course at Rollins, or who had the language in high school but did not score at least 550 on the Language Achievement Test of the CEEB. Staff

202 Intermediate French, German, Russian or Spanish [C]

The second semester of the intermediate course. Reading for comprehension and expansion of vocabulary; practice for improvement of oral and written proficiency; enhancement or cultural background; application and reinforcement of grammatical concepts. Prerequisite: 201 or equivalent. Staff

398 Directed Study

499 Independent Study for Seniors

(By permission, well-prepared sophomores or juniors may be allowed to undertake Independent Study.)

STUDY ABROAD

Qualified Rollins students may take a year or part of a year *in absentia* at a foreign university. The student may negotiate his/her admission independently with the

foreign university, may apply for admission to an approved foreign-study program administered by another U.S. college or university, or may apply for admission to one of the various Rollins overseas programs. If either of the first two options is chosen, the student should fill out the Request for Study Abroad form available at the Registrar's Office. If the program is in a non-English speaking country, the student must have adequate foreign language preparation. This means a B average in the study of the appropriate language through the Rollins 202-level of language courses or the equivalent.

Rollins Overseas Programs

Students may attend either the University of Sydney in Australia or the Institute of Irish Studies in Dublin, Ireland during the fall term. In the spring term Rollins offers a Semester-in-Colombia, held at the University of the Andes in Bogota. Students attending these programs earn the same number of credits as they would if they remained on campus. There is a full-time resident director in charge of each of the respective programs. Applications close February 15 for Australia and Ireland, and November 15 for Colombia.

At the University of the Andes, a student may choose up to 18 semester hours from the total course offerings of the University. The programs in Australia and Ireland encompass the following courses: Australia — Australian Social Anthropology; The Australian Economy; Australia, Asia and the Pacific; Australian History; Australian Literature; Australian Environmental Studies. Ireland — Modern Irish Economy, Modern Irish History, Twentieth Century Irish Literature, American-Irish Relations Since the Famine, and Irish Folk Studies.

Summer study tours to Madrid, Spain and Tours, France are made available on a demand basis. Other courses involving foreign travel are part of the regular winter term schedule. In the past these have included such courses as Theatre in London, Tropical Biology, Primate Study in Puerto Rico, and study tours of the Soviet Union, Germany, Spain, Italy and Martinique.

FR 321 Advanced Composition and Conversation

Required of French majors. Regular composition, practice, together with conversation practice derived from timely readings on subjects of student interest. Prerequisite: French 201 or a score of 550 on the Language Achievement Test of the CEEB. P. Lancaster/E. Miller

FR 322 Superior French

A study of the fine points of syntax and stylistics as used in composition, differences in written and spoken language, extensive conversation practice involving oral presentations, scenes and dialogues, and conventional expositions. This is a top-level practice course designed to give majors an opportunity to perfect the written and spoken language, and to provide students interested in improving their French, although not necessarily majors, a chance to keep their fluency. P. Lancaster/E. Miller

FR 331, 332 Survey of French Literature and Culture

Studies in French History, literature, art and music from 1848 to the present. Taught in French by lecture and discussion. Written and oral expositions on outside readings. Prerequisites: French 321 or French 331. Required of French majors as a prerequisite for 400-numbered courses. P. Lancaster

FR 402 French Poetry [L]

Development of poetry from the Middle Ages to the present time. Includes principal works and authors such as, La Chanson De Roland, the Pleiade, la Fontaine Tristan L'Hermite, Chenier, Hugo, Lamartine, de Vigny, Baudelaire, Mallarme, Peguy, Apollinaire, Eluard, Char and Prevert. Prerequisite: A 300-level French course. Alternate years. Offered in 1980-1981. E. Miller

FR 404 French Theater [A]

Development of the theater from the Middle Ages to the present. Includes principal authors such as Jodelle, Corneille, Racine, Moliere, Beaumarchais, Voltaire, Musset, Hugo, Claudel, Giraudoux, Sartre, Ionesco and Beckett. Prerequisite: A 300-level French course. Alternate years. P. Lancaster

FR 406 The French Novel [L]

Development of the novel from the 17th century to the present time. Includes principal authors such as Mme de la Fayette, Mlle de Scudery, Voltaire, Rousseau, Bernardin de St-Pierre, Hugo, Balzac, Flaubert, Zola, Proust, Gide, Butor, and Robbe-Grillet. Prerequisite: A 300-level French course. Alternate years. E. Miller

FR 413 Seminar [L]

Study of literary or linguistic topics of special interest or importance. Possible topics include French literature from Africa and the Caribbean, French Avant-Garde Theatre, French short stories, and contemporary French literature. P. Lancaster/E. Miller

FR 431 French Civilization [D]

A cultural course designed to give the student an appreciation of the history, arts and customs of France. Seminar structure, papers, final. Prerequisite: A 300-level French course. P. Lancaster

GERMAN

GN 321 Advanced Composition and Conversation

Extensive practice in writing compositions and in conversation about a wide range of different topics. Building a large and varied vocabulary is stressed. Prerequisite: German 201 or score of 550 in the Language Achievement Test of the CEEB. P. Bonnell

GN 331, 332 Survey of German Literature [L]

A panoramic view of German literature from the earliest times to the present. Required of German majors as a prerequisite to all 400-numbered German literature courses. Prerequisite: German 201 or score of 550 in the Language Achievement Test of the CEEB. P. Bonnell

GN 401 Eighteenth- and Nineteenth-Century Literature [L]

Vorklassik, Hocklassik, Romantik. Prerequisite: German 331, 332. P. Bonnell

GN 404 Late Nineteenth- and Twentieth-Century Literature [L]

Realism, naturalism, and modern. Prerequisite: German 331, 332. P. Bonnell

GN 413 Seminar

Advanced study of literary or linguistic topics of special interest or importance. Prerequisite: German 331, 332, and consent of instructor.

RUSSIAN

RN 110 Soviet Literature in Translation [L]

Study of selected writings of the post-revolutionary, Soviet Period of Russian literature and its influence on cultural development in the Soviet Union. No knowledge of Russian required. Appropriate for non-majors. E. Danowitz

RN 311 Soviet Life and Society [D]

Study of the dominant aspects of Soviet life and the historical, cultural, sociological and economic factors which influence the society. Readings of contemporary Soviet authors and current publications support the instruction. No knowledge of Russian required. Appropriate for non-majors. E. Danowitz

RN 321 Advanced Composition and Conversation

Required for majors. Regular composition practice, together with intense conversation practice derived from timely readings on subjects of student interest. Prerequisite: Russian 202 or consent. E. Danowitz

RN 331 Survey of Soviet Literature [Solzhenitsyn] [L]

Study of selected works of Alexander Solzhenitsyn, written during the Soviet Period of Russian literature. No knowledge of Russian required. Appropriate for non-majors. E. Danowitz

RN 332 Survey of Russian Literature [L]

A panoramic view of Russian literature from the earliest times to the present. Prerequisite: Russian 201 or score of 550 in the Language Achievement Test of the CEEB. E. Danowitz

SPANISH

SH 103/403 Don Quijote [L]

Open to all. No prerequisite for non-Spanish majors. Prerequisite for Spanish majors: SH 331. Spanish majors read *Don Quijote* in Spanish and write their exams in Spanish. Non-Spanish majors read the novel in English and take their exams in English. All lectures and discussions are in English. F. Sedwick

SH 321 Advanced Composition and Conversation

Required of Spanish majors. Prerequisite: Spanish 201 or score of 550 in the Language Achievement Test of the CEEB. F. Sedwick

SH 331, 332 Survey of the Literature of Spain [L]

A panoramic view of Spanish literature from the earliest times to the present. Required of Spanish majors as a prerequisite to all 400-numbered Spanish literature courses. Prerequisite: Spanish 201 or score of 550 in the Language Achievement Test of the CEEB. E. Borsoi

SH 341, 342 Survey of Spanish-American Literature [L, C]

A panoramic view of Spanish-American literature from the earliest times to the present. Prerequisite: Spanish 201 or score of 550 in the Language Achievement Test of the CEEB. B. Stadt

SH 401 Golden-Age Drama [A]

Sixteenth- and seventeenth-century drama of Spain. Prerequisite: Spanish 331, 332. B. Stadt

SH 405 Nineteenth-Century Literature of Spain [L]

Prerequisite: Spanish 331, 332. B. Stadt

SH 409 Twentieth-Century Literature of Spain [L]

Prerequisite: Spanish 331, 332. F. Sedwick

SH 413 Seminar

Advanced study of literary or linguistic topics of special interest or importance. Prerequisite: Spanish 331, 332, and consent of instructor. Staff

SH 431 Spain and the Spanish Character

A cultural course relating the arts, history, and customs to an analysis of the contemporary Spanish society. Prerequisite: Spanish 201. Offered only in the Rollins Summer program in Spain.

•GEOLOGY AND GEOGRAPHY

The following courses do not constitute a full major in either Geology or Geography. They are rather offered as electives to complement major fields of study and to fulfill general course requirements.

G 140 Introduction to Geography [N]

Emphases are placed upon the atmosphere (climatology), the hydrosphere (hydrology and oceanography), the lithosphere (geology — especially with land-forms and the processes which shape them), and how these interact with the biosphere and help to explain the special distribution of life-forms. With laboratory. E. Scheer

G 150 Geology [N]

A general geology course combining physical geology — dealing with minerals and rocks, their formation, distribution and alteration, as well as the formation of natural landscapes — and historical geology — dealing with earth history and the fossil record. The major unifying theme will be built around the global theory of plate tectonics. The laboratory will emphasize the properties and identification of selected important minerals and rocks, and the interpretation of both topographic and structural maps. A number of excellent movies will serve as surrogate trips to various parts of the globe, whereas a few real field trips will emphasize the geological processes and products of Central Florida. With laboratory. Alternate years. E. Scheer

ES-G Environmental Geology [N]

Two major components comprise this course. First, geological resources will be studied including their origin, composition and classification, distribution, their exploration, recovery and utility. Laboratory and field trips will stress economically important minerals, rocks and fossil fuels as well as visits to geologically based extractive industries in the Central Florida area. Second, emphasis will be given to case studies of geologic hazards such as earthquakes, volcanism and damages induced by

water movements. The implications that geologically hostile environments hold for rational planning processes will be discussed. It is recommended that G 150, the introductory geology course, be taken prior to this one. Alternate years. With laboratory. E. Scheer

•HISTORY

Edmondson (Head), Lane, Levis, Williams

The study of History aims at the understanding and imaginative reconstruction of past human activities, institutions, ideas, and aspirations in light of current knowledge, concerns, and hopes for the future. History belongs to both the Humanities and the Social Sciences. It is studied both for its own sake and for the light it throws on the present problems and future prospects of particular societies and mankind in general.

The study of History provides a broad foundation for informal citizenship and for professional specialization. Recent graduates of the Department of History have been admitted to outstanding graduate schools and schools of law. Most recent graduates are engaged, however, in business, banking, and government service. A small number of those who major in History are now teachers. In fact, a rigorous education in History inculcates knowledge and skills useful to any pursuit.

Every History major must complete twelve courses, of which at least six must be on the 300-400 level. A major must also complete H 113, 114, 242, and 243 or demonstrate that he/she already possesses a strong foundation of knowledge in Modern European and American History. A major may, with the advice and consent of his/her advisor, substitute as many as five Political Science courses as a part of the twelve course requirement. A combined History major must complete eight courses, of which at least four must be on the 300-400 level. Each major is expected to plan the sequence of courses in close consultation with his/her advisor.

H 101, 102 The Essentials of World Civilization [C]

An introduction to the dominant traits, achievements, and dilemmas of man's great civilizations from the Ancient Far East to Modern Europe. 101 will reach from pre-history to 1400; 102 will extend from 1400 to the present. Principally lecture. Extensive readings and several exams. Recommended for non-majors. C. Edmondson

H 112, 114 History of Modern Europe [D]

An introduction to the political, intellectual, social, economic and religious history of Europe from the Renaissance to the present. 113 covers 1500-1815; 114, 1815-present. Lecture/discussion. Appropriate for non-majors. C. Edmondson/B. Levis

H 208 Ancient History [C]

A survey of the ancient world from prehistoric times through the middle of the fifth century with emphasis on Greece and Rome. Lecture/discussion. Appropriate for non-majors. Alternate years. B. Levis

H 209 Medieval History [D]

An introduction to medieval Europe from the fifth to the fifteenth century with special emphasis on social, political, and religious developments. Lecture/discussion. Appropriate for non-majors. Alternate years. B. Levis

H 242 [D], 243 [S] History of the United States

A survey of the major political, social, and economic themes from the era of the

American Revolution to the present. H 242 covers 1763-1877; H 243 covers 1877 to the present. Required readings include a textbook, secondary source essays, primary source documents and perhaps a topical book. Brief papers or interpretive essays assigned. Appropriate for non-majors. J. Lane/G. Williams

EC-H 245 Economic History of the United States [D]

This course will explore the evolution of American economic developments and institutions from the colonial period to the present. It will include an analysis of the impact of these developments and institutions on American social and political life. Critiques and/or research paper required. May be counted toward Economics or Business Administration major. Appropriate for non-majors. J. Lane

H 260 History of Modern China [C]

An examination of the principal cultural, political, social, and economic themes leading to the emergence of the Peoples' Republic of China. Chinese relations with the West will be emphasized. Diversified and extensive readings and several short topical papers. Appropriate for non-majors. Alternate years. C. Edmondson

H 271 Afro-American History [C]

Designed primarily for the freshman and sophomore level, this is an introductory course in Afro-American History. The approach will be topical in nature, within a chronological framework. The course endeavors to read Afro-American history from a Black perspective rather than from outside Black America. Alternate years. A. Reddick

H 280 Modern German History Since 1860 [D]

A survey of German political, social and cultural history during the last century: the Empire of Bismarck and Wilhelm II and its collapse under the impact of World War I; the Weimar Republic; the Nazi rise to power; the Third Reich and the postwar division of Germany. Appropriate for non-majors. Lecture/discussion. B. Beer

ED-H 305 History of Education [D]

An interpretative survey of the role education has played in Western society with an emphasis on an historical analysis of the development of American education in the context of the nation's social and intellectual history. 3-4 paperback textbooks; critiques and/research paper. J. Lane

H 310 European Social and Intellectual History:

Romanticism [1790-1850] [D]

A study of the ideas termed "Romantic", organized around the theme of the search for wholeness and harmony in man, nature, society, politics and culture. Topics covered will include: the response to the Enlightenment; German Idealism; the conservative, organic-religious view of society and politics; cultural nationalism, and reactions to the modernization of society. Seminar. Term paper. Prerequisite: H 114. B. Beer

H 325 Tudor-Stuart England, 1485-1714 [D]

An intensive examination of the political, constitutional, religious, and social development in England. The course will center around class discussions based upon extensive readings. Primary source research paper required. Appropriate for non-majors. Alternate years. B. Levis

H 326 Hanoverian England, 1714-1918 [D]

A continuation of H 325, focusing on the period from the Hanoverian succession to

the end of World War I. Class discussions will be based upon extensive readings. Primary source research paper is required. Appropriate for non-majors. Alternate years. B. Levis

H 328 European Diplomacy, 1848 to World War II [D]

An intensive study of the concepts, techniques, forces, and personalities which dominated European diplomacy in the era of Europe's greatest power and which formed the prelude to contemporary diplomacy. Intensive readings and six topical papers. Alternate years. C. Edmondson

H 330 The Great Depression and the New Deal [S]

After a study of the 1920s, this course focuses on the impending economic crisis and the subsequent New Deal reform movement. Emphasis is given to conflicting interpretations of Roosevelt and the New Deal. Reading: 3-4 paperbacks. Critiques and/or research paper. Alternate years. J. Lane

H 333 Age of Jefferson and Jackson [D]

An examination of major trends in American history from the writing of the Constitution to the Mexican War. Among the developments covered will be the conflict between Jeffersonian and Hamiltonian philosophies, foreign policy, the growth of political parties, Jackson's impact upon the presidency, and American expansionism, all of which will be discussed within the context of the increasing tension between nationalism and sectionalism. Discussion emphasized. Reading includes 5-6 paperbacks plus articles in library. Analytical essays or research paper assigned. Prerequisite: H 242 or consent. Alternate years. G. Williams

H 334 Civil War and Reconstruction [D]

An in-depth examination of the period 1846-1877. Besides the causes and consequences of the war, special attention will be given to the slavery-expansion controversy, changes in political parties, and the attempt to provide constitutional protection for the freedmen. Discussion emphasized. Reading includes 5-6 paperbacks plus articles in library. Analytical essays or research paper assigned. Prerequisite: H 242 or consent. Alternate years. G. Williams

H 335 History of the South [D]

An interpretive survey of the major themes in Southern history from the Revolutionary period to the present. Among the topics covered will be the Old South mystique, Southern self-consciousness, Afro-American subculture, Southern preoccupation with race, the New South creed, and myths of Southern history. Discussion emphasized. Reading includes 5-6 paperbacks plus articles in library. Analytical essays or research paper assigned. Prerequisite: H 242 or 243 or consent. Alternate years. G. Williams

H 341 Era of the American Revolution [D]

An examination of the major social, political, and economic developments in the Colonial-Revolutionary periods. The nature of colonial society, the place of the colonies in the British mercantile system, and the origins of American political culture will be analyzed, followed by a study of the causes and consequences of the Revolution. The U.S. Constitution will be examined as the culmination of the Revolutionary era. Discussion emphasized. Reading includes 5-6 paperbacks plus articles in library. Analytical essays or research paper assigned. Prerequisite: H 242 or consent. Alternate years. B. Levis

EC-H 342 History of Economic Thought [D]

An examination of the development of economic theory and analysis from the ancient Greeks to the present, but focusing on economic thought from the physiocrats and Adam Smith to the Austrian School and J. M. Keynes. Lecture/discussion based on readings from the writings of the economists. Term paper examining the thought of a single economist will be required. Suitable for both History and Economics-Business Administration majors. Alternate years. B. Levis

H 344 [D], 345 [S] American Constitutional History

A survey of the major themes in American constitutional history from the Colonial period to the present emphasizing the influence of historical movements (Jacksonianism, Progressivism) and historical developments (industrialism, war) on the Constitution. Discussions will center on major Supreme Court decisions. 344 covers Colonial period to 1877; 345 from 1877 to the present. 4-6 critiques required. Narrative and document textbooks. J. Lane

H 346 America Since 1945 [S]

Thematic approach to post-World War II years, with some attention to social and cultural trends. Discussion emphasized. Reading includes 5-6 paperbacks plus articles in library. Analytical essays or research paper assigned. Prerequisite: H 243 or consent. Alternate years. G. Williams

H 354 History of Imperial Russia [D]

A survey of the political, social, economic, and intellectual forces which shaped the development of Russia to the outbreak of World War I. Extensive readings and several short topical papers. Appropriate for non-majors. Alternate years. C. Edmondson

H 355 History of Twentieth Century Russia [D]

Emphasis is placed upon the Revolutions of 1917, the stabilization of the Soviet regime and the rise of Stalinism, industrial modernization and its impact, and the expansion of Soviet power. Extensive readings and several topical papers. Appropriate for non-majors. Alternate years. C. Edmondson

H 362 History of American Foreign Policy [D]

An exploration and analysis of the patterns and themes in the development of American foreign policy from the early period to the present. Requirements include written projects and class participation. Alternate years. J. Lane

H 365 Topics in History

Selected studies which will deal with various aspects of American and Modern European history. Topics will generally be narrow in scope, allowing students to investigate a particular problem in some depth. May be repeated for credit.

H 365A National Security in the Nuclear Age [S]

An in-depth study of America's national security establishment and its formulation of Cold War policy after World War II. Particular emphasis will be given to nuclear strategic thought. Reading: 3-4 paperbacks. Critiques and/or research paper. J. Lane

H 365B European Imperialism 1870-1914

The scramble for colonies became intense in the late 19th century. This expansion took the European powers into East Asia, Central Asia, the Middle East and Africa. This course will examine the interesting story of European imperialistic expansion and also the role that it played in the outbreak of World War I.

H 365C Anatomy of Revolution [D]

This course will be a comparative study of revolutionary activity in England during the 17th century and America and France in the 18th century. The impact of intellectual, social, and political forces in each instance will be analyzed and contrasted with the other revolutionary movements. Students will write a short essay on each revolution. Appropriate for non-majors. B. Levis

H 365D Black Protest Movements in America [C]

Examines the development of Black Nationalism in the U. S. and the response of the black masses to this movement. The readings cover the period, 1800-1970, with particular emphasis on the philosophies and activities of prominent Black historical figures. Two lectures, two discussions per week. A. Reddick

H 365E The Reformation [D]

An analysis of the causes and consequences of the Protestant Reformation in the sixteenth and early seventeenth century. The course will examine the main religious, political, and social causes of the Reformation in Germany, Switzerland, and England; the reaction of the Roman Catholic Church to the Protestant challenge; and the social, political, and intellectual consequences of the movement. Discussion emphasized. Students will write a series of short essays. Appropriate for non-majors.

H 383 The Decline of Europe [D]

A topical survey of Europe's loss of equilibrium and hegemony after 1914. Primary emphasis will be upon the impact of World War I, the rise of totalitarianism, the road to World War II, and European attempts to establish a new stability and a new role in the contemporary world. Major research paper, or an equivalent assignment, required of all students. Appropriate for non-majors. C. Edmondson

H-PO 392T Development of American Political Culture [S]

This course will be devoted to an examination of the origins, historical development, and contemporary manifestations of ideology in the United States. Students will be exposed to major interpretations of the development of American liberalism and to critical analyses of its basic assumptions. A central theme will be an examination of Lockean liberalism as the core of American political thought and culture, as manifested in the following concepts: human nature, possessive individualism, private property, competition and the marketplace, democratic capitalism, success, equal opportunity, progress, and Social Darwinism. Discussion emphasized. Reading includes 5-6 paperbacks plus articles in library. Analytical essays or research paper assigned. Prerequisite: H 242 & H 243, or PH 215 or consent. Alternate years. G. Williams/T. Lairson

H 480 Selected Studies in History

This course is designed for students wishing to pursue special advanced studies in history which will be determined in consultation with the instructor. Students enrolling must be majors, have junior or senior standing, have a cumulative average of 9.5 or better, and have the approval of the department chairman and the instructor. May be repeated for credit.

•MATHEMATICAL SCIENCES

Skidmore (Head), Bowers, Child, Naleway, Roth

A student majoring in mathematical sciences obtains the best undergraduate preparation for careers in pure and applied research, teaching, actuarial science, operations research, computer science, and certain analytical areas of the engineering sciences and the life sciences. In addition, mathematics majors are welcomed into diverse professional areas such as law, medicine, and business, government and industrial management.

Frequently, students choose to combine majors, for example, mathematics and physics, or mathematics and economics. Students who wish to pursue both liberal arts and a more specialized degree in science enroll in one of our three-two programs (see Pre-Engineering) and obtain an additional degree in systems science, computer science, or engineering.

The undergraduate major in mathematical sciences requires the completion of 12 courses. In addition, knowledge of either the BASIC or FORTRAN computer programming languages is required; this can be obtained by completion of either of the courses Introduction to Computing (SC 150) or Computers in the Sciences (SC 160).

The standard group of 8 required courses is the following:

- M 111 Introductory Calculus
- M 112 Intermediate Calculus
- M 211 Multivariable Calculus
- M 212 Ordinary Differential Equations
- M 219 Probability
- M 220 Mathematical Statistics
- M 311 Advanced Multivariable Calculus I
- M 321 Linear Algebra

In consultation with the advisor, the student will select two courses from each of the following two groups:

Group A

- SC 260 Intermediate Programming with the PASCAL Language
- SC 350 Assembly Language Programming and Small Computers
- SC 360 Data Structures and File Manipulation
- M 312 Advanced Multivariable Calculus II
- M 322 Algebraic Structures
- M 340 Numerical Analysis
- M 398 Directed Study

Group B

- M 412 Complex Analysis
- M 430 Optimization
- M 440 Operations Research
- M 498 Senior Seminar
- M 499 Independent Study

Typically, a freshman planning to major in mathematics will take Physics 201-202, Mathematics 111-112, and distribution courses as required. Well-qualified entering students are advised to take the Advanced Placement Examination in calculus for college credit and exemption from one or more terms of calculus.

Students interested in graduate work and computer science should elect Mathematics 340 and Science 260, 350 and 360. Students planning graduate study in operations research should include Mathematics 340, 430 and 440. Those interested in secondary school teaching should include Mathematics 322 and 398 in geometry.

If graduate work is contemplated, the student should schedule as many upper-level mathematics courses as possible and should acquire a reading knowledge of German, French, or Russian, and proficiency in English composition.

M 101 Consumer Mathematics [Q]

An introduction to finite mathematics. Investigates some applications of arithmetic and mathematical thought in modern society. Includes many of the following topics: percentages; simple and compound interest; insurance rates; the metric system; linear systems; probability and statistics; linear programming; simple computer programming. Not open to students with credit in any other college mathematics course.

M 109 Precalculus Mathematics [Q]

The concept of function; behavior and properties of the elementary functions, i.e., polynomial and rational functions, exponential, logarithmic, and trigonometric functions; inverse functions. Emphasizes curve sketching. Some review of algebra; no use of calculus. Intended primarily for biology, pre-medicine, business and economics majors who do not elect M 110 or M 111. Students with two years of high school algebra, one year of geometry, and some trigonometry should elect M 110 or M 111 rather than this course.

M 110 Applied Calculus [Q]

Techniques of differentiation and integration of the elementary functions with applications to business, economics, and the life sciences. Some multivariable calculus. Intended as a terminal calculus course, primarily for biology, pre-medicine, business and economics majors who do not elect M 111, but suitable for other well-prepared students who desire some knowledge of calculus. Not open to students with credit in M 111. Prerequisite: M 109 or two years of high school algebra, one year of geometry, and some trigonometry.

M 111 Introductory Calculus [Q]

The concept of function; derivatives of the elementary functions, i.e., polynomial, rational, exponential, logarithmic, trigonometric and inverse functions; extremal problems; curve sketching; the definite integral; anti-derivatives; some integration techniques. Prior knowledge of calculus is not assumed. Mathematics and physical science majors should elect this course. Other science and business and economics majors should elect either this course, M 109, or M 110. Suitable for other well-prepared students. Not open to those students with credit in M 110. Prerequisite: M 109 or two years of high school algebra, one year of geometry, and some trigonometry.

M 112 Intermediate Calculus [Q]

Continuation of Mathematics 111. More integration techniques and applications; improper integrals, infinite series, power series; elementary differential geometry. Prerequisite: M 110 or M 111 or equivalent.

M 120 Statistical Methods [Q]

The application of statistics will be demonstrated by reference to analysis of real data, with sampling of that data by each of the members of the class. Calculations and interpretations of statistics will be made in laboratory-type sessions by the students. Suitable for non-science majors. Mathematics and physical science majors are urged to elect M 220 rather than this course.

SC 150 Introduction to Computing [Q]

An introduction to computer solutions of problems in non-science fields. Course

topics include a computer language (BASIC), simple logic in writing programs, and the capabilities of computers. Other special topics may be covered. With computer help sessions. Does not count as a lab science distribution course.

SC 160 Computers in the Sciences [Q]

An introduction to simple and advanced BASIC programming with primary emphasis on the sciences. Statistical tests, computer logic, and computer solutions to problems encountered in physics, chemistry, biology and the behavioral sciences will be included. With computer help sessions. Primarily for science majors.

M 198 Directed Study [Q]

Topics selected from set theory, groups, number theory, geometry, foundations, history, computer applications. Prerequisite: Consent.

M 211 Multivariable Calculus [Q]

Continuation of Mathematics 112. Vectors, functions of several variables and their graphical representations; partial derivatives, directional derivatives; multiple integrals; cylindrical and spherical coordinates; Green's and Stokes' theorems. Prerequisite: M 112.

M 212 Ordinary Differential Equations [Q]

First order equations; theory of linear differential equations; series solutions; systems of linear differential equations; introduction to boundary value problems and eigenvalues. Prerequisite: M 211 or consent.

M 219 Probability [Q]

Sample spaces, counting techniques, conditional probability, random variables (discrete and continuous), special distributions including binominal, Poisson, uniform, and normal. Recommended to mathematics, physics, and pre-engineering majors. Corequisite: M 211. R. Roth

M 220 Mathematics Statistics [Q]

Basic ideas of distributions and expectations. Theories on hypothesis testing, regression and correlation; sampling theory, estimation and Bayesian methods. Prerequisite: M 219. R. Roth

SC 260 Intermediate Programming with the PASCAL Language [Q]

Survey of computer applications in areas such as file management, gaming, CA I, process control, simulation, and modeling. Problem solving will be emphasized with solutions written in the PASCAL Language. Computer projects will be selected from various applications. Prerequisite: SC 150 or 160 or consent. J. Child

M 298 Directed Study

Topics selected from set theory, groups, number theory, geometry, foundations, history, computer applications. May be repeated for credit. Prerequisite: Consent.

M 311 Advanced Multivariable Calculus I [Q]

Transformations, the Jacobean, implicit functions; vector analysis; Green's divergence, and Stokes' theorems. Prerequisite: M 211.

M 312 Advanced Multivariable Calculus II

Function spaces with inner product, orthogonal bases; Schwarz and Bessel ine-

qualities; general Fourier series with emphasis on trigonometric case, application to boundary value problems; Fourier integral with applications. Prerequisite: M 311.

M 321 Linear Algebra [Q]

Matrix algebra; vector spaces; linear transformations and matrix representations; similar matrices; relation between linear mappings and systems of linear equations; inner product and norms; determinants; eigenvalues; Cayley-Hamilton theorem. Applications emphasized. Prerequisite: M 212.

M 322 Algebraic Structures [Q]

Number systems, groups, rings, unique factorization domains, fields. Applications emphasized. Prerequisite: at least two 200-level mathematics courses.

M 340 Numerical Analysis [Q]

Flow charting, programming; numerical techniques in interpolation, integration, algebraic and differential equations, matrix inversion and curve fitting. Prerequisite or corequisite: M 212, SC 160. J. Bowers/D. Child

SC 350 Assembly Language Programming and Small Computers [Q]

Assembly Language concepts and implementation. Relationships among computer components, structures and systems. Emphasis is on PDP/II and 8080A Computers. Features use of a stand alone computer. Offered in alternate years; not offered in 1980-81. Prerequisite: SC 260. J. Child

SC 360 Data Structures and File Manipulation [Q]

Data structures, concepts and algorithms used in the solution of non-numerical problems. Applications to data management systems, file organization, information retrieval, list processing, and programming languages. Offered in alternate years; not offered in 1979-80. Prerequisite: SC 260. J. Child

M 398 Directed Study [Q]

Topic selected from differential equations, linear programming, game theory probability and statistics, model theory, and other advanced topics in mathematics. Prerequisite: Consent of instructor. May be repeated for credit.

M 399 Independent Study [Q]

Advanced topics in mathematics and computer science, including structure of programming languages, operating systems, artificial intelligence, and computer graphics.

M 412 Complex Analysis [Q]

An applied analysis course suitable for junior and senior students in the fields of mathematics, physics and pre-engineering. Topics include Cauchy-Riemann equations, analytic functions, complex series, solutions to boundary value problems, Laplace transform applications and conformal mapping. Prerequisite: M 311.

M 430 Optimization [Q]

Linear and nonlinear extremal problems of functions of several variables with linear constraints; linear programming using the simplex algorithm; optimal decision-making. Offered in alternate years; not offered in 1980-81. Prerequisite: M 211 and M 321.

M 440 Operations Research [Q]

Constructing mathematical models of the deterministic and stochastic types;

Markov chains, game theory, graphs, queues, and their applications. Offered in alternate years; not offered in 1979-80. Prerequisite: M 219 and M 321.

M 498 Senior Seminar [Q]

A study of an advanced topic in pure or applied mathematics chosen by the staff in consultation with junior and senior majors. Offered in alternate years. Not offered in 1979-80. Prerequisite: Consent.

M 499 Independent Study [Q]

Advanced topics in mathematics and computer science, including real analysis, topology, structure of programming languages, operating systems, artificial intelligence, computer graphics.

•MUSIC

Rosazza (Head), Anderson, Brockman, Gallo, Woodbury

A major in Music prepares students for careers in composing, arranging, studio teaching and all aspects of performing music, e.g., soloist, orchestra member, church organist, conductor, etc. Students anticipating a major in Music are expected to indicate this choice on applying to the College.

The requirements for entrance and graduation as set forth in this catalog are in accordance with the regulations of the National Association of Schools of Music in which the department holds full membership.

A major performance area is required of each music major and may be selected from the following: piano, harpsichord, organ, voice, strings, woodwinds, brasses, or percussion. The student receives two private lessons a week, or the equivalent, in his chosen field of applied music during the full four years. Examination of technical and musical progress will be given at the end of the first and third terms of each year. A student concentrating in composition may substitute advanced work in this field in lieu of applied music during the third and fourth years. A student concentrating in choral conducting may substitute advanced work in this field in lieu of applied music during the third and fourth years, although it is recommended that the applied music continue.

Music majors will study theory and history of music in synthesized courses aimed to produce comprehensive musicians. A total of 14 courses is required for graduation. Piano as a secondary instrument is required without credit: degree of achievement is subject to departmental satisfaction.

Music majors will participate in public recitals and are required to attend concerts at the College as well as designated performances off campus. Satisfactory participation in music ensembles is required during each term of the student's residence in the College; participation in the Chapel choir is obligatory. At least two rehearsals a week are scheduled.

Each student applying for admission as a Music major must have an audition or submit a tape recording of his/her work to be eligible for acceptance by the music department. This should be done before March 1 (See Admissions section). In September an examination in the rudiments of music will be given entering students; non-credit study will be required of those unable to pass this examination satisfactorily.

For combined-major requirements, see Curriculum Section.

Entrance Requirements In Applied Music

To enter the four-year degree course with applied concentration in:

Organ:

The student should have completed sufficient piano study to enable him/her to perform some of the Bach Inventions and the easier Mozart, Haydn, and Beethoven Sonatas. The student will also be asked to play one of the major and minor scales in a moderate tempo.

Piano:

The student should be prepared to play the major and minor scales and arpeggios in all keys and to read at sight simple piano literature. In addition the student should play four works chosen from the following list:

1. An Invention or a Prelude and Fugue of Bach
2. A Sonata of Haydn, Mozart or Beethoven
3. A Nocturne of Chopin
4. A work by a 20th century composer.

Harpsichord:

The student should exhibit a level of keyboard proficiency equivalent to that required of entering piano majors.

Strings (Violin, Viola, Cello):

The student must demonstrate an adequate technical foundation based on scales and etudes, and perform a Concerto by Vivaldi, a Sonata by Tartini, or an equivalent work of this school.

Voice:

The student should be able to sing with musical intelligence standard songs in English, and also demonstrate ability to read a simple song at sight.

Woodwinds, Brass, Percussion:

The student of a woodwind or brass instrument must be able to play major, minor, and chromatic scales with various articulations at a moderate tempo, and perform etudes, technical studies, and a solo of medium difficulty from the instrument's standard repertory. In addition the student is expected to be able to sight-read passages of medium difficulty. The prospective percussion student should have an excellent snare drum technique and a basic familiarity with the tympani and mallet instruments.

Classical Guitar:

Major and minor scales (Segovia Ed.). Adequate musical performance of such standard Etudes as those of Aguado, Carcassi, Giuliani, and two selections from the first ten Sor studies (Segovia Ed.).

Graduation Requirements

In order to graduate the student must:

Organ:

Study the principles of organ technique and interpretation through the performance of works selected from all periods of composition. Basic requirements of service playing will be included.

Piano:

Perform several of the major keyboard works of Bach and Beethoven, shorter pieces by Brahms, Chopin, Schumann, and Debussy; examples of contemporary music, including works by American composers. The student is expected to read at sight with reasonable accuracy and fluency.

Harpsichord:

Perform several works of the English, Italian, French and German schools including a major work of J. S. Bach.

Strings (Violin):

Perform satisfactorily scales and arpeggios in three octaves; studies by Kreutzer and Fiorillo; standard concerti and sonatas by Bach, Handel, Mozart, and Viotti; shorter representative pieces (first two years) and (in the third and fourth years) studies equal in difficulty to those of Rode and Paganini; Bach sonatas for violin alone; advanced concerti and sonatas from the classic, romantic, and modern repertoire. (N.B. — Those majoring in Viola and Cello will pursue a comparable program of study.)

Voice:

Exhibit command of breathing, phrasing, and musical style and sing satisfactorily works from the standard repertoire, as well as oratorio and opera arias, and contemporary art songs. Voice majors must complete satisfactorily two foreign language requirements: that of the general college, and at least two terms of a second language.

Composition:

Show unusual aptitude in theoretical courses and possess marked creative ability (first two years); in third and fourth years must be able to compose in the larger forms of the sonata, fugue, etc., as well as in lyric forms of the song and the instrumental piece.

Woodwind, Brass and Percussion Instruments:

Perform a major concerto and demonstrate the ability to play satisfactorily all of the standard orchestral repertory of his/her instrument.

Choral Conducting:

Exhibit a knowledge of selected works from all periods and their stylistic interpretation. The student will also be expected to demonstrate a mastery of the elements of musicianship essential to the training of a choir, including basic vocal technique, and perform appropriate works of the medium.

Classical Guitar:

In the first two years the student must perform Segovia major and minor scales, chromatic octaves, as well as some of the less difficult works of Tarrega, Sor and Villa-Lobos. In addition, he/she must demonstrate knowledge of apoyando (rest stroke), tirando (free stroke), legati, and other aspects of guitar technique. In the third and fourth years the student will study the standard guitar repertory, including works by Villa-Lobos, Bach, Terrega, and others.

Required Courses for Music Majors

Comprehensive Musicianship I, II and III (101, 102; 201, 202; 301, 302)

Literature and Performance I, II, III and IV (105, 106; 205, 206; 305, 306; 405, 406)

Highly recommended courses:

- 20th Century British and American Poetry (E 366)
- Elementary or Intermediate French (FR 101, 102 or 201)
- Elementary or Intermediate German (GR 101, 102 or 201)
- Elementary or Intermediate Italian (IT 101, 102 or 201)
- Introduction to Art History (Art 201, 202)
- Philosophy of the Arts (PH 212)
- Shakespeare (E 317, 318)

COURSES FOR MUSIC MAJORS ONLY

MU 105, 106 Literature and Performance I [A]

Private study of a major instrument or voice, incorporating research in the literature of the medium. Performance is required in ensembles and recitals. Prerequisite for 106: consent. Staff

MU 205, 206 Literature and Performance II [A]

A continuation of individual study of major instrument or voice with emphasis on performance and research into the literature of the medium. Prerequisite for 206: consent. Staff

MU 305, 306 Literature and Performance III [A]

A continuation of Literature and Performance II. Prerequisite for 306: consent. Staff

MU 405, 406 Literature and Performance IV [A]

A study of the wide-ranging repertoire of the medium, with emphasis on public presentation and projection of each style period. Individual and class instruction. Prerequisite for 406: consent. Staff

COURSES FOR ALL STUDENTS

MU 101, 102 Comprehensive Musicianship I [A]

Study of the evolution of the 18th century through stylistic and theoretical analysis as well as performance by class participants. Consent. C. Threatte

MU 112 Design for Listening [A]

An amateur listener's survey of the greatest music in all styles on recording. Non-technical, for non-majors. W. Gallo

MU 113 Music in Vienna 1750-1828 [A]

One of the richest periods in all music, and all of it taking place in one locale. An introductory study of the music of the Viennese masters: Haydn, Mozart, Beethoven, Schubert in all the musical forms in which they wrote. The first four weeks will be devoted to music fundamentals as preparation for understanding the music of this era. Attendance at specified concerts required. Appropriate for non-majors. Lab fee \$7.50. W. Woodbury

MU 117 Introduction to Folksong Style [A]

A stylistic study of folksongs of North America (in the Anglo-American and Mexican traditions) with respect to: 1. the cycle of oral transmission and composition; 2. the form, style and organization of the text; 3. the musical style from the melodic, rhythmic and formal aspects. Laboratory work to involve performing and/or aural-analyzing folk songs. Alternate years. W. Gallo

MU 201, 202 Comprehensive Musicianship II [A]

Study of the music of the 19th century through stylistic analysis, composition and performance. Strong emphasis will be placed on theoretical procedures and sight singing. 201 Prerequisite for 202. Consent. W. Woodbury/A. Carlo

MU 207/307 Vocal-Choral Practicum [A]

A course designed to meet the needs and wishes of the general college student who wishes vocal instruction and practical application. One session per week of voice, plus two rehearsals and the choir's services in the chapel. Participation in the choir is required to enter the vocal class. Vocal production and technique will be chief occupation of the class. Audition/consent by Mr. Anderson and/or Mr. Rosazza. May be repeated for credit.

MU 216 19th Century Romantic Music [A/D]

An introduction to the music of the greatest composers of the 19th century. Concentrated listening to Beethoven, Chopin, Schumann, Wagner, Tchaikovsky, R. Strauss, et al. Periodic written reports. Appropriate for non-majors. Consent or any 100 level music course.

MU 220 Symphony in Concert [A]

Discussion and analysis of compositions to be performed at Florida Symphony Orchestra concerts during the spring term. Attendance at 10 performances with written reviews required. Lab fee: \$15.00. Appropriate for non-majors. W. Woodbury

MU 301, 302 Comprehensive Musicianship III [A]

Study of the evolution of music from Gregorian chant through the Renaissance by means of stylistic analysis, composition and performance. Theoretical emphasis. 301 prerequisite for 302. Consent. W. Gallo

MU 314 Twentieth-Century Music [A]

A study of the significant developments of music since 1900 with special attention given to parallel movements in art. (Interdisciplinary). Prerequisite: any 100 level music course or consent. T. Brockman

MU 318 Aspects of American Popular Music from 1900 to the Present [A]

A study of the growth of American popular music from the cultural, the anthropological, and creative viewpoints. The role of Negro influence upon American popular music will be stressed. Term paper required. Offered alternate spring terms. Appropriate for non-majors. Prerequisite: Consent or any 100 level music course. W. Gallo

MU 333 Introduction to the Symphony [A]

The development of the symphony from Haydn to the 20th century works of Prokofiev. Concentrated listening both in and out of class to the greatest works of the masters of symphony, particularly during the 19th century. Prerequisite: any 100 level music course or consent. Appropriate for non-majors. T. Brockman

MU 402 Comprehensive Musicianship IV [A]

An elective course for upper division music majors. Detailed study of the musical styles of the twentieth century.

MU 399/499 Independent Study

Private and/or class instruction in all instruments is available to non-music majors upon a professor availability basis. Consent required. A moderate charge will be made.

Mills Memorial Library contains complete or nearly complete collections of the works of:

Bach	Mendelssohn
Beethoven	Mozart
Berlioz	Scarlatti
Handel	Schubert
Haydn	Schumann

as well as Music of the Baroque and Music of the Renaissance.

•PHILOSOPHY AND RELIGION

Wavell (Head), Darrah, DeNicola, Edge, Peters, Wettstein

The department offers majors in Philosophy and in Philosophy and Religion which provide the best available undergraduate preparation for four kinds of careers: teacher of philosophy in a four-year or junior college, lawyer, minister of religion, and director of religious education. Since philosophy and religion deal with the basic principles and concepts of most of the other subjects taught at the college, these majors also provide the best all-round education for those without specific careers in mind.

Requirements for full majors.

Introduction to Philosophy (103)

Ethics (108)

Introduction to Logic (123)

History of Early Western Philosophy (201)

History of Modern Philosophy (206 or 207)

Seven electives (four at the 300- or 400-level) chosen from:

Philosophy (not fewer than five)

125, 208, 212, 215, 225, 308, 309, 310, 311, 312, 313, 346, 347, 348, 398, 499.

Religion (not more than two)

113, 115, 116, 218, 225, 317, 321, 325, 327, 328, 329.

Students majoring in Philosophy and Religion are required to take the following courses:

Introduction to Philosophy (103)

Ethics (108)

History of Early Western Philosophy (201)

The Old or New Testament (205 or 206)

Development of Christian Thought (218)

Seven electives (four at the 300- or 400-level) chosen from:

Religion (not fewer than four)

113, 114, 115, 116, 205 or 206, 220, 225, 291, 308, 317, 321, 325, 327, 328, 329, 331, 427, 499.

Philosophy (not fewer than two)

125, 206 or 207, 208, 212, 215, 309, 310, 312, 313, 346, 347, 348, 398.

Notes:

1. We urge every major in Philosophy and in Philosophy and Religion to acquire a sound background in his/her special interest by electing, in consultation with a

major adviser, supporting courses in other disciplines. For example, if your special interest is in the Philosophy of Science, you should back this up with courses in natural sciences; again, if your special interest is in Aesthetics (Philosophy of Art) you should back this up with courses in Art, Music and/or English Literature.

2. Majors are advised not to put off taking the basic five required courses until their senior year. Ideally, they should be taken first.

REQUIREMENTS FOR COMBINED MAJORS

Students taking a combined major in *Philosophy* are required to take the following program of courses:

- a. Any *three* of the five required courses for the full major for philosophy.
- b. *Five* electives (at least two at the 300- or 400-level), not fewer than three being in philosophy; the remainder may be in religion.

Students taking a combined major in *Philosophy and Religion* are required to take the following courses:

- a. The Old or New Testament (205 or 206), Development of Christian Thought (218).
- b. Introduction to Philosophy (103) or Ethics (108) or History of Early Western Philosophy (201).
- c. *Five* electives (at least two at the 300- or 400-level), not less than two being in philosophy, and not less than two being in religion.

Students taking a combined major should try to take courses in Philosophy or Religion that are related to the other half of their major.

PHILOSOPHY

PH 103 *Introduction to Philosophy* [D]

A general introduction to the aims, methods and content of philosophy through a study of some of its most important figures and perennial problems. The course involves the student in the discussion of such problems as: how do we know that our ideas are true? what is reality? does God exist? why is there evil in the world? is there a mind distinct from the body? are we free or determined? what is our highest good? how do we know right from wrong? what distinguishes the beautiful from the ugly? what is the place of the individual in society? These discussions are designed to develop the student's powers of reasoning and criticism. Lecture/discussion; term paper. H. Edge

PH 108 *Ethics*

The primary purpose of this course is to develop the student's ability to reason about what is right and wrong. A variety of ethical theories are presented and such questions as the following are discussed: what does it mean to be a virtuous person? can one be held responsible for one's actions if they are casually determined? does the good life involve intrinsic values? how are actions, virtues and intrinsic values justified? what does it mean to be moral? why should one be moral? Format: Informal lectures and recitation and discussion. Three tests and one paper will be required. D. DeNicola

PH 123 *Introduction to Logic* [Q]

An introduction to the principles of valid reasoning which covers both the traditional and contemporary approaches. There are no term papers in this course and only one textbook. However, regular homework examples will be set. Appropriate

for non-majors. B. Wavell

PH 125 Practical Reasoning

This course is designed to improve the student's ability to reason in everyday situations. A large number of arguments drawn from political addresses, newspaper articles, letters to the editor, school textbooks, and other similar sources, are analyzed and classified, and principles are presented which enable the student to detect and avoid fallacies. Additionally, procedures are given for deliberating, evaluating, choosing and deciding. Unlike PH 123 this course contains no symbolic logic. Students are expected to compile their own collection of fallacious arguments and analyze them. Grades are based on these analyses and examinations. B. Wavell

PH 201 History of Early Western Philosophy [D]

A history of the development of philosophical thought in the ancient Western world from its beginnings in the 6th century B.C. until 300 A.D., focusing on the classical cultures of Greece and Rome. The course is divided into four segments: the Pre-Socratic philosophers; Socrates and Plato; Aristotle; and Late Hellenistic philosophy (including the Stoics, Sceptics, Epicureans and Cynics). Readings are from primary sources. Appropriate for non-majors. H. Edge

PH 206 Modern Philosophy: Rationalism [D]

The development of European philosophy during the seventeenth- and eighteenth-centuries. The principal philosophers studied are Descartes, (the father of modern philosophy), Spinoza, Leibniz and Kant. Emphasis will be placed on the influence of these philosophers on current philosophical thinking. Appropriate for non-majors. Not offered in 1979-80.

PH 207 Modern Philosophy: Empiricism [D]

This course traces the history of one of the main themes of modern philosophy in the 17th and 18th centuries. The principal philosophers to be examined are John Locke (a main inspirer of the writers of the United States Constitution), Bishop Berkeley and David Hume. Lectures/discussions. The course is a good introduction to philosophy for both majors and non-majors. Not offered in 1979-80.

PH 208 Topics in Ethics

This is a second-level course dealing with particular themes or issues in the subject. Prerequisite: Philosophy 108. Not offered 1979-80. May be repeated for credit if a different topic is chosen.

PH 212 Philosophy of the Arts [A]

This course investigates the following topics: the nature of art, its interpretation and its value. Both classical and modern views are examined. The goal of the course is to introduce the student to the philosophical issues in the arts and to enable him/her to develop criteria for evaluating the various art forms. Appropriate for non-majors. D. DeNicola

PH 215 Social and Political Philosophy [D]

Deals with such topics as social contract theory, natural rights, punishment, and the nature of freedom and justice. Readings will be chosen from such "classical" authors as Hobbes, Locke and Hume as well as from authors of the contemporary analytical school. Appropriate for non-majors. H. Edge

PH 225 Philosophy of Law [S]

An introduction to the principles, procedures and concepts underlying legal practices. Some of the topics that will be covered are: the nature and limits of law; the

theory of punishment; legal rights, liabilities and responsibilities; judicial reasoning; justice; and the relation of law to morality. The course will consist of lectures and discussions based on Martin Golding's "Philosophy of Law", and homework readings will be assigned from E. A. Ken's "Law and Philosophy". One term paper will be required. Appropriate for non-majors. B. Wavell

ES-PH 289 Ethics and the Environment

Using a general systems approach, this course will explore the interrelationships between people's basic guiding values, the use of the earth's resources, and the possibilities for human survival. Reviews the current "storm of crises" confronting humankind (population, food, energy and pollution), and what technologically possible solutions are available; seeks to discover what kinds of actions ought to be done, what kinds of attitudes ought to be promoted, and how people — including ourselves — might be motivated to do what is right. Offered spring 1981. K. Peters

PH 308 Studies in Philosophy

A seminar on selected topics in philosophy. May be repeated for credit if a different topic is taken.

PH 308B Studies in Philosophy: Seminar on Values

A seminar on the general theory of values. A review will be made of many kinds of values that occur in everyday life — moral, religious, aesthetic, pragmatic, monetary and intellectual — and a variety of theories that have been proposed to explain them will be examined. B. Wavell

PH 308E Studies in Philosophy: Seminar on the Emotions

This seminar challenges the traditional opposition of reason v. the passions, of the cognitive and the emotive. We will examine alternative theories of the emotions, the role of the emotions in human life, and ways of "educating" the emotions. Readings will be drawn from philosophical, psychological, and educational sources, both classical and contemporary. Prior experience in philosophy or psychology is suggested. D. DeNicola

PH 309 Materialism and Idealism [D]

A study of the nineteenth-century philosophers Hegel, Marx and Schopenhauer. Not offered 1979-80. H. Edge

PH 310 Existentialism [D]

A study of the thought of the major existentialist philosophers, including Kierkegaard, Nietzsche, Husserl, Heidegger, Sartre, Camus and Merleau-Ponty. The course is framed historically in order to exhibit the lines of philosophical development. The course material is restricted to the philosophical core of existentialism, which, as one of the most powerful intellectual currents of the twentieth century, has had impact on the arts and social sciences as well. Readings are from both primary and secondary sources. Several short tests and a paper are required. Prerequisite: one course in philosophy. H. Edge

PH 311 Philosophy of Science

A critical discussion of the presuppositions, methods and leading concepts of the sciences — mainly the natural sciences. The object of the course is to enable students to understand science as a human, intellectual enterprise. Two texts are used: a short exposition of the leading topics in the philosophy of science, and a book of articles by the chief contemporary writers in the field. Recommended for science majors. Prerequisite: one course in philosophy. Not offered 1979-80. B. Wavell

PH 312 Philosophy of Education [S]

A study of the opposing points of view regarding the proper aims and methods of education. The topics that are discussed include: the moral aspects of teaching, the rights of students and their parents in educational situations, academic freedom, indoctrination, the teachability of virtue, moral constraints on instructional methods, and punishment. Prerequisite: one course in philosophy. Not offered 1979-80. D. DeNicola

PH 313 Contemporary Analytic Philosophy

This course deals with one of the three major movements in contemporary philosophy, tracing the development of analytic philosophy from its beginnings at the turn of the century with Bertrand Russell and G.E. Moore up to the present day. Instead of a term paper, students will be expected to keep an academic journal, comments on which will be done with a tape-recorder. Not offered in 1979-80. B. Wavell

PH 317 Philosophy of Religion

This course introduces the student to an examination of the assumptions of religious thought and is designed to promote critical thinking, in particular a willingness and ability to subject religious beliefs to rational tests. Issues to be explored include: the nature of God; the existence of God; the problem of evil; the relation of faith to reason; the reality of miracles; mystical experience and its status as a way of knowing; the nature of religious language; and the meaning and verification of religious ideas. The course format includes informal lectures and discussions. Suitable for non-majors. A. Wettstein

PH 346 Philosophy of the Social Sciences

An examination of philosophical problems encountered in the social sciences. Among the topics considered are: the logic of concept formation and measurement, the question of objectivity, the nature of historical explanation, the use of ideal types, the alleged uniqueness of historical events, the difference between "hard" and "soft" sciences, and moral considerations raised in social science research. This course is recommended for social science majors. Prerequisite: one course in philosophy or in behavioral science. Not offered 1979-80.

PH 347 Philosophy of Language

A study of the philosophical problems arising out of attempts to understand the structure and functioning of natural language. Topics to be discussed will include: the roles played by concepts and sense experience in language; the analytic-synthetic distinction; semantic and pragmatic fallacies; the linguistic basis of common-sense reason; and conceptual analysis. The main text will be Dr. Wavell's *Language and Reason*. Appropriate for language and behavioral science majors. Prerequisite: one course in philosophy. B. Wavell

PH 348 Philosophy of Mind

A study of selected topics in the philosophy of mind, including: freewill; knowledge, belief and awareness; self-awareness; reasons and causes in human behavior, action and conduct; intentions; alternative accounts of purposive behavior. This course is recommended for behavioral science majors. Prerequisite: one course in philosophy or behavioral science. Not offered 1979-80. H. Edge

PH 398 Directed Study for Juniors

PH 491, 492 Senior Synoptic Course

Students are admitted to this course from a variety of different majors. During the

course the students explore the basic methods, problems, assumptions, "Irreducibles" and values of their own fields. This is a year-long course sequence. Entrance by recommendation and consent. D. DeNicola

PH 499 Senior Independent Study

RELIGION

R 113 World Religions: Far Eastern [C]

An exploration into the inner perspectives, forms, beliefs and rituals of Far Eastern religions, including Hinduism, Buddhism and the religions of China and Japan. The format will include lectures and discussions based on a text and readings. Appropriate for non-majors. A. Wettstein

R 114 Religion in America [S]

A philosophical and historical exploration of the American religious heritage. Topics will include: civil religion; religious liberty; revivalism; indigenous movements; liberalism and conservatism; missions and social action; black and white in religion; ecumenism and interfaith relations; and contemporary developments. Informal lectures/discussions. Appropriate for non-majors. K. Peters

R 115 World Religions: Near Eastern [D/C]

A study of the patterns of religious life and thought in Judaism, Zoroastrianism, Christianity, and Islam, emphasizing the interpretation of their sacred scriptures and historical development. Appropriate for non-majors. A. Wettstein

R 116 Introduction to Religion [S]

A thematically arranged course that examines various ways in which people in contemporary American society can be religious. Some ways, such as devotion, ritual, ethics, and mysticism, have their roots in traditional Eastern and Western religions. Others, such as psychological wholeness, political revolution, technological progress, and sensuous experience, are twentieth-century, non-transcendent religious lifestyles. Each way will be discussed from the points of view of advocates, interpreters, and critics. Hour tests, a paper, and a final examination are required. Appropriate for non-majors. K. Peters

R 205 Old Testament [D]

An exercise in the reading of the Old Testament. Appropriate for non-majors. T. Darrah

R 206 New Testament [D]

An exercise in the reading of the New Testament. Appropriate for non-majors. T. Darrah

R 218 Development of Christian Thought [D]

An introduction to a rich variety of issues that have occupied the minds of Christian thinkers over almost two thousand years. Issues will include: the nature of God; the problem of evil; the nature and work of Christ; redemption; the sacraments; Christian living; and the methods of theological reflection. The student will become more thoroughly acquainted with at least two key thinkers in the history of Christian thought through the study of some of their major writings. Informal lectures/discussions. Appropriate for non-majors. K. Peters.

R 220 Religious Issues in Contemporary Literature [L]

An examination of recent literary works in terms of the religious issues raised and particular answers offered, in order to discover how novelists and poets portray the spiritual crises of our time as well as how their media serve religious communication. Works in the major Western religious and humanist traditions are studied and discussed, with research papers presented in seminar fashion. Appropriate for non-majors. Not offered 1979-80. A. Wettstein

R 225 Studies in Chinese Thought: from Confucius to Mao-Tse-Tung [C]

An exploration of the thought of major figures and movements in China from its "classical" period to the present, including the Analects of Confucius, the Tao Te Ching, Chuang Tzu, Mo-Ti, the Buddhist schools, Neo-Confucianism, and the philosophical addresses of Mao-Tse-Tung. The studies will be done in the context of the development of Chinese civilization. Appropriate for non-majors. A. Wettstein

R 291 Nature of Mystical Experience [Directed Study]

An exploration of mystical experience and meditative techniques by studying the writings of contemplatives of several religious traditions. Prerequisite: one course in religion. Not offered 1979-80. A. Wettstein

R 308 Topics in Religion

A seminar on selected topics in religion. Prerequisite: one course in religion. May be repeated for credit if a different topic is taken.

R 325 Issues in Science and Religion

Examines the relationship between the Judeo-Christian religious heritage and modern science. Issues to be explored will be selected by students from the following: Christianity's contribution to the rise of modern science; the challenge of science to traditional Christian beliefs; methods of knowing in science and religion; the indeterminacy principle and human freedom; biological, cybernetic, and religious views of man; evolution and creation; God and nature; and the impact of scientific technology on human values. Discussions, presentations, journals, and papers will constitute the course methodology. Prerequisite: one course in natural science and in philosophy or religion, or consent. Not offered 1979-80. K. Peters

R 327 Contemporary Religious Thought

An investigation of the major options developing in western religious thought in the twentieth century in existential, process, linguistic, secular and historical contexts. Issues dealt with include: theological language; the relation of religion to science; the theological foundation of ethics; and "death of God" theology. Prerequisite: one course in religion. Not offered 1979-80.

R 328 Existentialism and Religious Thought

A study of the problems and possibilities of theism, atheism and humanism from existentialist perspectives. Authors to be examined include: Kierkegaard, Nietzsche, Heidegger, Sartre, Jaspers, Buber and Marcel. Themes of existentially-oriented literature are related in classes conducted in seminar fashion. Prerequisite: one course in philosophy or religion. Not offered 1979-80. A. Wettstein

R 329 Creation and Religion [A]

An examination of the process of creation in nature, society, and the individual from the twentieth century philosophical and religious perspectives of such thinkers as

Alfred North Whitehead, Charles Hartshorne, Henry Nelson Wieman, and Ralph Wendell Burhoe. The course considers insights on creation from biology, psychology, literature, and the fine arts. Recommended to students in a wide variety of majors who are interested in how creation occurs. Prerequisite: one course in philosophy or religion. K. Peters

R 331 Religious Responses to Social Issues [S]

A work-study course that examines theological justifications for the involvement of religious institutions in programs of social reform, and provides direct contact with the work of such programs. Religious pronouncements will be examined in relation to biblical literature, theological and social theory, and the activities of churches and the people themselves. Prerequisite: one course in religion. May be repeated for credit. Not offered 1979-80. A. Wettstein

R 427 New Directions in Religious Thought

An examination of contemporary positions on the following current issues in Protestant, Roman Catholic and Jewish religious thought: the possibility of a "secular religion," the development of a "new morality", the prospects of ecumenical and inter-faith dialogue, birth control, and the relation of church and society. Prerequisite: one course in religion. Not offered 1979-80. A. Wettstein

R 499 Senior Independent Study

•PHYSICAL EDUCATION

Jucker (Head), Coffie, Copeland, Harris, Howell, Jarnigan, Justice, Mack, Meisel

All students are required to register for and complete successfully four terms of Physical Education. This includes one term of Basic Physical Fitness and three terms of elective lifetime recreational activities. All Physical Education courses offered are co-educational. Regular attendance and active participation are necessary to meet requirements of the College. Those students who have not successfully completed four terms by the end of the fall term of their third year will be referred to the Educational Policy Committee. Students who have completed four terms may register for any activity when openings and instructional personnel permit.

Students enrolled in Physical Education classes and those participating in intramural sports should have a physical examination each year. No student may enter any activity for which he or she is not physically fit.

Students bringing certificates of disability from personal physicians must have the certificates endorsed by the College physician before they will be accepted by the department.

All freshmen and transfer students must take the Rollins College swimming test at the beginning of the fall or spring term. Students who fail the test will be assigned to a swimming class until they can pass the test.

Physical Education Requirements for Transfer Students:

1. Students who transfer into Rollins after two years, regardless of their physical education background, are exempt from taking physical education at Rollins.
2. Students who transfer into Rollins after one year will be required to complete two semesters of physical education at Rollins. They will not be required to take Basic Physical Education.

The Physical Education requirements may be waived or altered for individual students for any of the following reasons:

1. Upon recommendation of the College physician after consulting with the Director of Physical Education.
2. For other exceptional cases, upon recommendation of the Director of Physical Education and with the approval of the Registrar.

The College will furnish all necessary playing equipment for physical education classes and intramural sports except uniforms, tennis racquets, and golf clubs. A specified uniform is required for men and women. Activities may be added or withdrawn at the discretion of the Physical Education Department.

Basic Physical Education

To be taken in first year, fall or spring term as assigned by the Registrar. A fitness program based upon Dr. Kenneth Cooper's Aerobic System which aims at the overall fitness and health of the body through activities which demand oxygen consumption.

The nature of this course and methodology is conducive to co-educational interests.

Electives [lifetime recreational activities]

Choice of:

Archery	Water Safety Instruction
Badminton	Waterski*
Bowling**	Volleyball
Canoeing	Hawaiian Dance
Fencing	Riding**
Golf	Sailing
Karate	Scuba**
Soccer/Softball	Basic-Intermediate Dance
Swimming	Intermediate-Advanced Dance
Tennis	

*fee course

**fee course, off campus

Intramural Activities

The Rollins College Intramural Program affords an opportunity for all students to participate voluntarily in competitive sports of their choosing. These activities are carried on in addition to the regular classes scheduled in physical education.

For the Men: Teams representing fraternities, freshmen, independents, faculty, current graduate students, and administrative staff compete. A trophy is awarded to the team receiving the greatest number of points during the college year. Sports include badminton, basketball, flag football, golf, sailing, soccer, softball, swimming, table tennis, tennis, and volleyball.

For the Women: Teams representing sororities and independents compete. The O'Brien Trophy is awarded to the group receiving the greatest number of points during the college year. Sports include badminton, basketball, bowling, golf, sailing, softball, swimming, table tennis, tennis, and volleyball.

•PHYSICS

Ross (Head), Carson, Mulson

The student with an interest in physics has several options of study to choose

from. If a student anticipates a professional career in physics, then a strong program in both physics and mathematics is planned. If a career in engineering is expected, the student can major in physics for the first three years at Rollins and then transfer to one of the engineering schools with which Rollins participates in a 3-2 program. (See Pre-Engineering Program.) Students often choose a combined major in physics and another field such as mathematics, education, or philosophy.

Present day job opportunities include doing research in industrial or federal laboratories, working with computer systems, teaching, or training in an industrial management program. Many students who major in physics continue their studies in graduate school in physics, or in such fields as astronomy, computer science, oceanography, medical physics, or education.

Well prepared students planning to major in Physics should take Chemistry 120-121 and Physics 201-202, together with Mathematics 111-112 in their freshman year. Advanced courses must include Physics 203, 308, 311, 314, 315, and 351 as well as Mathematics 211-212. The Departmental Seminar or Advanced Laboratory Practice plus one additional course selected from advanced offerings in physics, chemistry or mathematics are required of the major in the senior year. If graduate studies are contemplated, additional mathematics courses are recommended.

P 101 Astronomy

A descriptive approach to astronomy covering the characteristics and evolution of the solar system, structure and properties of stars and galaxies, evolution of the universe. One formal observing session each week for constellation and star identification, binocular and telescopic observations. Lecture/discussion. Appropriate for non-majors. With lab. J. Ross

P 107 Concepts of Physics

A course for science majors introducing the basic concepts of mechanics, wave motion, electricity, optics, atomic and nuclear physics with emphasis on the development of analytical reasoning and laboratory skills. For students who have not had high school physics. With laboratory. J. Ross

SC 130 Science and the Senses

(See description listed under Science.)

SC 150 Introduction to Computing

(See description listed under Science.)

SC 160 Computers in the Sciences

(See description listed under Science.)

P 195 Electronics [N]

This course is a study of solid state electronics with an emphasis on integrated circuits. Topics to be included are power supplies, amplifiers, clocks and timers, gating, and some digital work. Evaluation will be based on a laboratory work book, tests, and a project chosen by the student. J. Mulson

P 201 Fundamentals of Physics I [N]

An analytical approach to introductory classical physics: translational and rotational motion, forces in nature, conservation principles of momentum and energy, harmonic motion, and heat. Calculus is introduced where needed to clarify concepts. Logical reasoning and problem solving in the above areas are stressed. The laboratory work encompasses applications of the theory and formal lab reports to

strengthen written communication skills. The course is designed for freshmen (interested in chemistry, physics, mathematics or pre-engineering) and sophomores (pre-med or biology). Prerequisite: High school physics or equivalent. Corequisite: M 111. R. Carson

P 202 Fundamentals of Physics II [N]

A continuation of introductory classical physics: electrostatics, direct and alternating currents, electric and magnetic fields, wave motion, and optics. Continued use of calculus where necessary. Laboratory reports are required. Prerequisite: P 201. R. Carson

P 203 Introduction to Modern Physics [N]

A survey of quantum phenomena including atomic models and the wave/particle aspects of matter. Other topics include radioactivity, nuclear physics, and semiconductors. Applications of these areas of physics in medicine, engineering, and biology will be presented both in class and in the laboratory. Prerequisite: P 202. J. Ross

P 308 Mechanics [N]

A course covering particles, systems of particles and rigid bodies through the use of Newtonian, Lagrangian, Hamiltonian, and Relativistic mechanics. Three weekly class meetings plus a two-hour problem session. Prerequisites: P 202 and M 212. J. Mulson

P 311 Optics [N]

Physical optics: coherence and interference, Fraunhofer diffraction, Fresnel diffraction, spectroscopy, and polarization. Laboratory experiments correlated with theory. Prerequisites: P 202 and M 211. J. Mulson

P 314 Electricity and Magnetism [N]

A vector treatment of electrostatic fields in vacuum and dielectrics, solution of Laplace's and Poisson's equations, magnetic fields of moving charges, electrostatic and magnetic energies, and steady state circuit theory. With laboratory/problem sessions. Use of computing facility is encouraged. Prerequisites: P 202 and M 212. R. Carson

P 315 Electromagnetic Theory [N]

A problem-oriented approach to Maxwell's equations and the propagation of electro-magnetic waves in various media. Applications such as plasma probes, wave guides and system design. Lecture/discussion. One lab/problem session per week. Prerequisite: P 314. R. Carson

P 351 Quantum Physics [N]

Early atomic models, wave aspects of particles, the Schrodinger equation, quantum mechanical solution of one-dimensional potential barriers, periodic potentials, one- and three-dimensional bound state systems. Applications of simple potential problems to atomic, molecular and nuclear physics. With lab/problem session. Prerequisites: P 308 and P 314. J. Ross

P 401 Advanced Laboratory Practice [N]

A laboratory course emphasizing advanced laboratory techniques in atomic and nuclear physics. Each student will carry out a set of selected experiments during the term. Formal laboratory reports are required. Prerequisites: P 311 and P 314, or consent. J. Mulson

P 451, P 452 Quantum Mechanics I and II

The formal structure of quantum mechanics emphasizing both the conceptual aspects and the mathematical formulations. A self-paced personalized instruction course. P 451 covers linear momentum, motion of a free particle, Schrodinger's equation and a particle in one dimension. P 452 includes approximation methods, systems of particles, three dimension models, angular momentum and spin. J. Ross

P 498 Senior Seminar

A study of the evolution of physics and its place in modern society. Selected readings from the classical literature and current journals leading to oral and written presentations for class discussion. R. Carson

P 499 Independent Study

A study by the PSI method of a topic selected from the areas of astrophysics, atomic or nuclear physics, statistical mechanics, relativity, solid state physics or quantum mechanics. Staff

•POLITICAL SCIENCE

Valdes (Head), Gilbert, Lairson

The Political Science Department offers general introductory courses designed to acquaint students with political processes and behavioral characteristics of the United States and selected foreign cultures, as well as advanced courses for majors.

The field of political science involves the study of the origin, evolution, and decline of political order and government. Political scientists are interested in governmental institutions, how political decisions are made, the substance of those decisions, and the political resolution of societal conflicts. In addition, political scientists are also concerned with the fundamental question of how societies ought to be constituted.

There are many subfields which attempt to translate these concerns into practical knowledge. These include: political parties and voting behavior, interest groups, bureaucracies, international politics and foreign policy, executive politics and legislative behavior, political socialization, personality and politics, political culture and ideology, revolution, comparative politics, court systems and constitutional law, political philosophy, and policy analysis.

The study of political science has value in at least two ways. First, the politicization of contemporary society demands that informed and educated persons be knowledgeable about political processes. Second, there are several careers for which an extensive training in political science can be most useful. These include: higher education, the legal profession, state and local government, urban planning, the federal government, journalism, or any of the increasing number of quasi-public organizations seeking to monitor or influence public policy.

Requirements for the Major:

Majors in Political Science must complete twelve courses including four (4) core courses. The core courses are: PO 100P, Introduction to Politics: Comparative; PO 130I, Introduction to Politics: International; PO 160U, Introduction to Politics: American; and, Philosophy 215, Social and Political Philosophy. In addition, the major is required to take four *distribution* courses at the 300 and 400 level divided in the following manner: one course in the Comparative Politics sub-field bearing the

initial "P" after the course number as listed in the College catalog courses of instruction in Political Science; one course in the International Politics sub-field bearing the initial "I" after the course number; one course in the American Politics sub-field bearing the initial "U"; one course in the Political Theory sub-field bearing the initial "T." In each case, the relevant core course is prerequisite to the corresponding upper-division course. For example, PO 160U is prerequisite to all upper division courses in American Politics. The remaining four elective courses may be taken by observing one of the following options: (1) Up to four (4) courses may be taken outside the department in a single concentration as approved by the department from a list which is available from any Department member. If fewer than four courses are taken in the concentration outside the department, the balance must be taken in political science. Any exceptions to this list will be permitted only via written request from the student's advisor to the Head of the Political Science Department. (2) Alternatively, the major may choose to take these electives within the department to allow pursuit of greater depth in one or more of the sub-fields of the discipline. If this option is chosen, one of the courses must be a course entitled Seminar.

Combined majors must complete the *core and distribution* requirements as outlined above.

SPECIAL PROGRAMS

Washington Semester Program

A select number of Political Science majors and History majors have an opportunity to spend a semester in Washington studying public affairs. The Washington Semester Program, of which Rollins is an affiliated institution, is a cooperative arrangement with The American University whereby students participate in an academic program of seminars with public officials and those seeking to influence the policy process; an internship in a Congressional office, an executive agency, a public interest group, or local government; and research into a topic which enables the student to utilize Washington, D.C., as a resource laboratory.

Participants in the Program may select from separate programs in national government and politics, urban affairs, criminal justice, foreign policy, international development, economic policy, and American Studies. Full time faculty from American University direct the individual programs.

While enrolled in the Washington Semester Program the students, normally in their junior year, are accommodated at American University. They have full access to all library, cultural, and recreational facilities on the campus.

International Relations Program

The International Relations Area Studies Major (see description) is designed to give students exposure to the multi-disciplinary aspects of international life. It consists of work in Political Science, History, Economics, and Foreign Languages. While it is not directly vocational in nature, the International Relations major prepares students for graduate work, and for careers in international business and the foreign service.

The Latin American Studies Program

Rollins' long-standing Latin American Studies is at present a program in the Area Studies Major. (See description). The major is interdisciplinary in nature in that it focuses on the area of Latin America from a variety of perspectives. The Political Science Department, in conjunction with other departments, offers courses toward this major. The skills of the various disciplines are applied in the understanding of

the peoples, cultures and resources of Latin America. Naturally, the languages of the area are also studied.

These studies are not preparatory for a specific career, but are indispensable for students contemplating a career in business, government, or the professions where competency in the area study of Latin America is required or desirable. The major is also preparatory for students contemplating advanced graduate degrees in Latin American Studies.

COMPARATIVE POLITICS

PO 100P Introduction to Politics: Comparative

A study of political systems in the developed and emerging nations in order to provide a comparative analysis of man's experience with political institutions and processes. Appropriate for non-majors. L. Valdes

PO 112P The Latin Americans [C]

An introduction to the geographic, economic, social, historical, racial and ethnic, ideological, and political forces which condition the destinies and potential of the people of Latin America. This course is in part devoted to demolishing some stereotypes about the Latin Americans. It seeks to place Latin America in its proper perspective — as it was in the past, as it is now, and as it will be tomorrow, when its enormous potential is realized. Lecture/discussion/audio-visual aids/book critiques. Active participation will be highly rewarding. Appropriate for non-majors. Alternate years. L. Valdes

PO 301P Revolution in the Modern World

The course offers a summary of the literature on the theory and analysis of revolutionary causation and development, in order to introduce the study of a part of the politics of violence. The topics to be considered will include the meaning, dynamics, rationale and the goals of revolution. The topics are meant to suggest the content of the readings and the lectures. Given the controversial nature of the subject matter, class discussion is encouraged. Prerequisite: PO 100P. Alternate years. L. Valdes

PO 302P Politics in the Third World [C]

An introduction to the study of the political life of two-thirds of humanity in Africa, Asia, and Latin America. The comparative approach is used to focus on politics more typical of mankind than Western democracy or Communism. Prerequisite PO 100P. Alternate years. L. Valdes

PO 311P Authoritarianism: Right and Left

A descriptive analysis by the comparative method of contemporary types of authoritarian political systems with special emphasis upon Communist and Fascist variants. Prerequisite: PO 100P or consent. Alternate years. L. Valdes

PO 312P Western European Politics [D]

A comparative analysis of France, Great Britain, Germany, Italy and Sweden, including political culture, political structures, public policy, the development of the modern state, and contemporary political change. Prerequisite: PO 100P. Alternate years. T. Lairson

PO 321P The Politics of Latin America [C]

An approach to relate cultural traditions and socio-economic conditions in Latin

America to the nature of its politics and to convey other major approaches contributed by the study of comparative government to an understanding of Latin American governance. Prerequisite: PO 100P. Alternate years. L. Valdes

PO 422P Seminar in Comparative Politics

Designed for students pursuing special advanced studies in comparative politics. It attempts to introduce them to the challenges and rigors of graduate-type seminars. The instructor guides the student in conducting, preparing, presenting, and writing a final research paper. Progress reports, outlines, bibliographies and oral presentations are also required. Prerequisite: Completion of Core and distribution courses in Comparative Politics. Offered *Every Third Term*. L. Valdes

INTERNATIONAL POLITICS

PO 130I Introduction to Politics: International

An analysis of the basic concepts of international politics, including decision-making, conflict, deterrence, coercive diplomacy and power. Emphasis is placed on post World War II situations, with an in-depth study of Soviet and Chinese foreign policy. Appropriate for non-majors. T. Lairson

PO 132I World Issues of Our Times [S]

A forum for the development of informed attitudes and opinions, approached through a discussion of contemporary political problems. Among the issues that are considered, the following are only a sample: population, energy, environment, nuclear proliferation, food and hunger, interdependence. The core readings are taken from the yearly Foreign Policy Association's *Great Decisions* publication. Appropriate for non-majors. Alternate years. L. Valdes

PO 331I World Politics and International Economics

An examination of the political foundations of the international economic system, including the development of an international monetary system, the multinational co-ordination of economic policy, the functions of international economic organizations, the role of multinational corporations, energy and international politics, and the problem of economic development, exploitation, and dependence in the third world. Prerequisite: PO 130I. Alternate years. T. Lairson

PO 342I Comparative Foreign Policy

A comparative study of several important issues and problems in the formulation of foreign policy. This will involve an understanding of the development of theory, hypothesis formation and data collection. Several cases are drawn from the American, Soviet, Chinese, British, and French experience. Topics will include: the policy process, perception, bureaucratic politics, war and conflict resolution, deterrence, and coercive diplomacy. Prerequisites: PO 130I. Alternate years. T. Lairson

PO 351I American Foreign Policy [S]

This course will involve a detailed examination of 20th century U.S. foreign policy. It will include in-depth case studies of World War I and aftermath, World War II, inception of the Cold War, national security policy in the 50s and 60s, American interventionism, and the policy of detente. Each case study will focus on the politics of policy formulation, and the role of perception, socio-economic needs, and the international system in decision-making. Prerequisite: PO 130I. Alternate years. T. Lairson

PO 352I International Law [D]

A survey of the nature, sources, and application of international law. The role of law in structuring the relationships among states will be given consideration, particularly insofar as these involve questions of conflict. Case studies of significant international events will be utilized. Prerequisite: PO 130I. Alternate years. L. Valdes

PO 453I Seminar in International Relations

This course will involve an in-depth analysis of a broad range of contemporary problems in International Politics. The specific content will vary from term to term. Students will consider, in a seminar environment, a variety of interpretations of political and economic issues and will be required to develop several detailed policy position papers. Prerequisite: Completion of Core and distribution requirements in International Politics. Offered Every Third Term. T. Lairson

AMERICAN POLITICS

PO 160U Introduction to Politics: American [S]

Survey of the constitutional structure and operational pattern of the Federal system with emphasis on political behavior. Appropriate for non-majors. N. Gilbert

PO 361U State and Local Government

Study of the structure and operational patterns of state, county, and municipal government with emphasis on effective citizen participation. Special attention to evolving regional and intergovernmental relationships. Prerequisite: PO 160U. Alternate years. N. Gilbert

ES-PO 362U Environmental Politics [S]

This course will involve a detailed examination of the political dimensions and implications of the contemporary environmental and energy crises. It will include a consideration of the purposes and behavior of environmental political action groups, energy and environmental legislation, Congressional and Presidential behavior, the ideology of environmental politics, and an extensive discussion of the political, social, and cultural implications of a steady-state society. Prerequisite: PO 160U. Alternate years. N. Gilbert

PO 371U Parties, Public Opinion and Pressure Groups [S]

A study of the structure and functions of political parties, pressure groups and public opinion formation; the origin, development, economic and social composition of political parties; the nature and sources, strategy and tactics of group power within the context of the American Institutional setting, focusing on business, agriculture, labor, religion and the professions as organized power. Prerequisite: PO 160U. Alternate years. N. Gilbert

PO 372U The Presidency [S]

This course examines the evolution of the role of the President in the American political system, including changing political roles, congressional-executive relations, the effects of personality, the "Imperial Presidency," electoral politics, and effects on public opinion and policy. Prerequisite: PO 160U. Alternate years. N. Gilbert

PO 381U The Legislative Process [S]

Examines the context and processes of legislative decision-making, including the impact of elections, groups, bureaucracies and the norms of legislative behavior.

Evaluates legislatures in light of various theories of representation and conflict-management. Emphasis on the United States Congress and selected state legislatures. Prerequisite: PO 160U. Alternate years. N. Gilbert

PO 382U Constitutional Law [S]

American constitutional law and its growth, based on analysis and discussion of leading judicial decisions. Included will be discussions of judicial review, its meaning and its nature and the development of constitutional relationships between national government and the state as well as between the branches of the federal government. Prerequisite: PO 160U. Alternate years. N. Gilbert

PO 481U Seminar in American Politics

Designed for students pursuing special advanced studies in American politics. In a seminar setting, students will examine and evaluate major competing interpretations of American politics and the American polity. A significant research paper will be prepared by each student. Prerequisite: Completion of Core and distribution courses in American Politics. Offered *Every Third Term*. N. Gilbert

POLITICAL THEORY

PO 391T Political Theory [D]

This course will be devoted to an investigation of representative political philosophers and theorists. Students will be exposed to various interpretations of the political philosophy of thinkers such as Plato, Machiavelli, Hobbes, Locke, Smith, Bentham, Mill, Rousseau, Marx, Rawls, Lindblom, and Habermas. The relationship of political theory and ideology in the social and political process will be a basic concern of the course. Prerequisite: PH-215. Alternate years. T. Lairson

H-PO 392T Development of American Political Culture [S]

This course will be devoted to an examination of the origins, historical development, and contemporary manifestations of ideology in the United States. Students will be exposed to major interpretations of the development of American liberalism and to critical analyses of its basic assumptions. A central theme will be an examination of Lockean liberalism as the core of American political thought and culture, as manifested in the following concepts: human nature, possessive individualism, private property, competition and the marketplace, democratic capitalism, success, equal opportunity, progress, and Social Darwinism. Discussion emphasized. Reading includes 5-6 paperbacks plus articles in library. Analytical essays or research paper assigned. Prerequisite: H 242 and 243 or Ph 215 or consent. Alternate years. G. Williams, T. Lairson

PO 401T Psychology and Politics

This course provides an opportunity to examine some of the most interesting and exciting research in contemporary political science: the psychological dimension of political behavior. Students will concentrate on the psychological functions that political beliefs, values, and behaviors have displayed. This will require extensive reading in the theoretical and empirical literature. A crucial part of this course will involve gathering data for the analysis of the content and development of political beliefs. Prerequisite: Ph 215 or consent. Alternate years. T. Lairson

PO 399, 499 Independent Study

•*PRE-ENGINEERING [COMBINED PROGRAM]*

Ross, Coordinator

Rollins College cooperates with Columbia University, Georgia Institute of Technology, and Washington University of St. Louis in combined programs designed for students who wish to become professional engineers. The student attends Rollins for three years in a program of liberal arts and science before transferring to the engineering school for two years to complete the requirements in an engineering field. A student will receive a Bachelor of Arts degree from Rollins and a Bachelor of Science degree from the engineering school.

Fields of study include chemical, civil, electrical, mechanical, metallurgical and nuclear engineering. Other possible fields are industrial and management engineering, computer science, systems science and engineering mathematics. Additional sequences are possible which lead to graduate work in aerospace science, biomedical engineering, biomathematics, applied geophysics and environmental science.

The basic freshman and sophomore requirements at Rollins for all of these programs include:

1. Mathematics through differential equations (M111-112 and M211-212)
2. College chemistry (C120, 121, 212)
3. College and modern physics utilizing calculus (P201, 202)
4. Introduction to digital computers (SC160)
5. Courses in English, Humanities, and Social Sciences (six electives)

Before the start of the junior year, the student should plan with the program coordinator a sequence of advanced courses which will satisfy the departmental requirements at Rollins.

•*PRE-FORESTRY [COMBINED PROGRAM]*

Richard (Coordinator)

The cooperative Forestry program offers an excellent opportunity for combining liberal arts with a graduate degree in forestry from the Duke University School of Forestry and Environmental Studies. The student spends three years at Rollins followed by five semesters at Duke, and receives the Rollins B.A. degree together with the Master of Forestry degree from Duke. Master of Science and Master of Environmental Management cooperative degree programs are also available from the Duke School of Forestry and Environmental Studies.

To qualify for admission under these programs, a student should follow a course of study arranged in consultation with the Forestry Program Coordinator. A year of general biology and a semester of college math are the minimal requirements for admission to the Duke Forestry programs. Although specific courses are not required for admission, applicants must be aware that many fields within forestry require academic preparation of a specialized nature. Deficiencies, if any, must be satisfied in residence at Duke, possibly prolonging the time necessary to complete degree requirements. Accordingly, students interested in specific areas of forestry will be advised as to the specific preparatory courses recommended: for instance, a concentration in biology, business management, economics, mathematics, computer science, statistics, or sociology. Those with interests in forest science should strengthen their backgrounds in biology, chemistry, mathematics, and physics. Typical programs in fields offered at Duke are available upon request from the Dean of the School of

Forestry, Duke University, Durham, North Carolina 27706. Students interested in information on additional forestry programs should consult the Rollins Forestry Coordinator.

Depending on the specific interest area, recommended courses at Rollins might include:

English 101	or	Rhetoric & Composition
English 390		Expository Writing
Biology 236		Invertebrate-Vertebrate Zoology
Biology 105, 106		General Biology
Economics 211		Principles of Economics
Economics 355		Economics of the Environment
Biology 234		Plant Kingdom
Chemistry 120		Principles of Chemistry
Physics 107		Principles of Physics
Math 110		Applied Calculus
Biology 316		Ecology
ES 191		Environmental Studies — Natural Science
Biology 397		Tropical Biology (emphasis on rain forests)
Math 120		Statistical Methods
or		
Business Administration 201		Statistical Inference
Science 160		Computer in the Sciences
Biology 311		Plant Structure and Function

•PRE-LAW

Rollins College has a distinguished record in preparing young people for the study of law. Rollins graduates have studied in a large variety of excellent law schools and are engaged in legal practice across the country as well as internationally. Because admission to law schools and the bar is increasingly competitive, students aspiring to the legal profession should present themselves at the earliest date to the Office of the Registrar for referral to the Committee on Pre-Law Advisement. This Committee will provide students with individual advice in the selection of courses, aid in the identification and correction of individual academic weaknesses, offer guidance in the selection and application for admission to law schools, and make available individualized testing programs aimed at both the diagnosis of strengths and weaknesses and preparation for the Law School Admissions Test. In addition, the Committee will sponsor co-curricular activities designed to acquaint students with current developments in the legal profession.

Rollins College subscribes to the American Bar Association's official views on legal education. The A.B.A. holds that the law is an integral part of a free and vigorous society and that one cannot study the law effectively without understanding a variety of academic disciplines. Accordingly, the A.B.A. prescribes no uniform course of pre-legal education but only encourages students to develop those abilities which legal educators find to be of the greatest value; (a) comprehension and expression in words; (b) critical understanding of the human institutions and values with which the law deals; (c) creative power in thinking; and (d) habits of thoroughness, intellectual curiosity, and scholarship. Rollins College strives to inculcate these qualities in all students and, rather than offer a pre-law major, recommends that students interested in the law should pursue a highly rigorous curriculum based upon four characteristics:

1. extensive reading assignments drawn from varied and well written sources;
2. large amounts of well-directed class discussion;
3. ample opportunities for the preparation and criticism of written and oral reports; and
4. independent research projects which provide opportunity for original inquiry, organization of materials, and effective communication.

•PRE-MEDICINE

Advisors: Hellwege (Chairman), Cohen, Mulson, Ray, Richards, Roth

The pre-medical program offers an interdisciplinary approach to the preparation of a student who plans to enter a medical-related professional school. The program is constructed upon the idea of preprofessional courses in the context of a liberal arts background.

The science requirements of most health oriented professional schools are met by a specified number of courses in biology, chemistry, mathematics and physics. Although the program is designed to meet the admission requirements of most medical schools, students wishing to enter dentistry, veterinary medicine, pharmacy, optometry, and many other health-related professions are equally served by this major.

Minimal requirements are:

Biology:

Two Courses:

Biology 105-General Biology I

Biology 106-General Biology II

Mathematics:

Two Courses:

At least one of the two courses must be a course in calculus

Chemistry:

Four courses:

Chemistry 120-General Chemistry I

Chemistry 121-General Chemistry II

Chemistry 220-Organic Chemistry I

Chemistry 221-Organic Chemistry II

Physics:

Three courses:

Physics 201-Fundamentals of Physics I

Physics 202-Fundamentals of Physics II

Physics 203-Introduction to Modern Physics

Students without a strong background in the physical sciences and mathematics are advised to take Physics 107 — Concepts of Physics — and Chemistry 107 — Concepts of Chemistry — in their freshman year.

Electives:

Two courses to be chosen from the list below

Biology 308-Genetics

Biology 312-Animal Physiology

Biology 323-Comparative Vertebrate Anatomy

Biology 328-Vertebrate Embryology

Biology 391-Vertebrate Histology
and Microtechnique

Biology 431-Biochemistry I

Biology 432-Biochemistry II

Chemistry 320-Analytical Chemistry

Chemistry 431-Biochemistry I

Chemistry 432-Biochemistry II

English 290-Expository Writing

Behavioral Science 365-Physiological
Psychology

Mathematics 120-Statistical Methods

Chemistry 304—Physical Chemistry for the
Life Sciences

Chemistry 305, 306, 307—Physical Chemistry I, II, and III

Mathematics 220—Mathematical
Statistics

Other courses may be chosen with the consent of the premedical advisor.

Most professional schools in medicine and other health-related fields require for entrance specific courses not included in the list of minimal requirements for a major in pre-medicine. To meet the specific entrance requirements of the particular professional schools to which they plan to seek admission, students should select such courses as electives.

•PSYCHOLOGY

The Psychology program attempts to reflect the breadth, the excitement, the rigor, and the humanistically concerned application of scientific inquiry into human behavior and experience. We have developed the Psychology program with full recognition of diverse and individualized student objectives, including: 1) meeting the important needs of students who desire exposure to the unique ways of thinking about the human condition offered by psychology, but who do not have an interest in pursuing the field in any significant depth or for any directly applied purpose; 2) meeting the needs of those students who are pursuing related fields of academic study and/or professional intent where some knowledge of psychology is deemed appropriate (such as those majoring in business administration, education, religion and philosophy, sociology-anthropology, creative writing, pre-medicine, or pre-law); 3) meeting the needs of those who are interested in pursuing careers where graduate school may, or may not, be deemed as prerequisite, but where psychology clearly applies as an appropriate or relevant major (such as personnel work, secondary teaching, vocational and educational guidance or similar "helping" professions, special education, early childhood education, day-care work, etc.); and 4) meeting the needs of those seriously pursuing a graduate-based career in professional psychology (such as being a college-university teacher, a researcher, a practicing clinician, an industrial psychologist, etc.).

In attempting to meet these various educational goals, the department offers a frequent and accessible introductory course and several topical courses suitable for majors and non-majors alike. For the major student, we require the "Introduction to Psychology" (PY 101) plus three "core" courses designed to add breadth to a student's exposure in psychology (these include: PY 238 — Developmental, PY 254 — Personality, and PY 261 — Learning). Additional requirements of majors are the inclusion of at least five courses at the 300-400 level that do not include Independent Study, Field Experiences, Internships or Research.

Since the departmental faculty wish to best serve the varied and specialized interests of each individual student majoring in psychology, we strongly encourage students to seek a departmental advisor as early as possible in the development of their programs. This assures that the long-term planning of course selections will best serve the personalized needs of each student. In some cases, we will advise independent research, supervised internships, and reading courses. In other cases, offerings from other departments might be selected as integrated supplements to a well designed program. In still other cases, the offerings of structured topical courses within the department will be deemed most appropriate and totally adequate for the educational needs of the individual.

PY 101 Introductory Psychology

This course is an introductory survey of the major topical areas in psychology, including physiological, sensation-perception, developmental, learning, information

processing, motivation, social, personality, psychopathology, and research methods. The course is designed both for majors and non-majors. It is a team-taught course of lecture format with numerous film presentations as supplements. Students are examined four to five times in the term by objective tests. R. Ray and J. Upson

PY 121 Perspectives in Psychology

This course reviews a particular topic which will serve as a vehicle for the presentation of the psychological perspective. An attempt is made to address the topic under consideration in such a manner as to make it most appropriate for non-majors and students having no prior background in psychology. May be repeated for credit providing that a different perspective topic is studied.

PY 150 Stress and Anxiety

This course explores the phenomena of stress and anxiety as experienced in current social settings. Attention will be directed toward identifying specific stress agents, evaluating ways of altering stress-filled situations, and ways of learning to cope more effectively with stress and anxiety. The course will be conducted as a seminar with periodic lectures as necessary. J. Upson

PY 210 Psychopathology

The question of behavior is examined from both the medical and learning model. The major diagnostic categories are surveyed. Modern treatment procedures are discussed as well as diagnostic instruments. Laboratory experiences are arranged to give some experience in clinical work.

PY 221 Perspectives in Psychology

This course reviews a particular topic which will serve as a vehicle for the presentation of the psychological perspective. An attempt is made to address the topic under consideration in such a manner as to make it most appropriate for non-majors and students having no prior background in Psychology. May be repeated for credit providing that a different perspective topic is studied.

PY 225 Environment and Man's Behavior

An introduction to the basic concepts and research on interactions between naturalistic settings and human behavior. By focusing on the interactional character of biological man and his physical habitat, both man and his current environmental concerns are brought into ecological-psychological perspective. This course is especially suitable for Environmental Studies majors as well as Behavioral Science majors. The course involves lectures, discussions, and some field projects. Examinations are integrative essays. R. Ray

PY 228 Sleep

A review of current research covering the psychological and physiological aspects of sleep. A sleep laboratory provides for students to observe the stages of sleep through analysis of the electroencephalogram (EEG) and electrocardiogram (EKG). Students so inclined may conduct research projects in the laboratory. Course requirements include three examinations, theory paper and optional project. J. Upson

PY 238 Developmental Psychology

A study of the psycho-social development of children with emphasis on social relationships and the ability to interact with children. The implications of philosophical points of view concerning children are studied. Three hours of work in the

Children's Center is required of each student. Weekly seminars are held for discussion purposes. Students will register for the nine, ten, or eleven o'clock period, Monday through Wednesday. Laboratory seminar on Tuesday. M. Farkash

P 254 Personality

A study of traditional and contemporary theories concerning the ways in which individuals organize their personal and social selves. Behavioral and experimental approaches are presented. Focus is placed upon the use of autobiographical data for understanding one's own personality. Students have the opportunity of taking a variety of personality tests. Course requirements include weekly abstracts, theoretical and autobiographical papers, and periodic lab reports. J. Upson

PY 261 Learning

This is one of three core courses required for all psychology majors. The course introduces the fundamentals of behavior acquisition and modification, and surveys the basic behavioral principles of reinforcement, stimulus discrimination, extinction, and sequential organization. Emphasis is placed upon total competence learning, thus requiring the student to advance beyond the learning stages of recognition and recall. Evaluations based on objective and association exams as well as optional contract performances. R. Ray

PY 315 Topics in Psychology

An advanced exploration of theory and research in selected areas of psychology. Topics for consideration are at the discretion of the instructor. May be repeated for credit.

PY 320, 321 Clinical Psychology I and II

The course covers the major aspects of clinical work — diagnostic instruments, counseling, behavior therapy. Both the theoretical and applied aspects of clinical work are studied in some detail. Experience is arranged for supervised training and practice in the major areas of testing, counseling, and behavior therapy. Prerequisite: Psychopathology and consent. M. Farkash

PY 324 Guilt and Anxiety

This course explores the creative and pathological dimensions of guilt and anxiety from philosophical, experiential and experimental approaches. Attention is directed to temporal and spatial dimensions of consciousness and of the environment, as elements constituting these phenomena. Seminar with discussion of selected readings. Personality theory or a course in philosophy is recommended. J. Upson

PY 325 Motivation

This course reviews the research of comparative psychophysicologists, animal behaviorists, social psychologists, and personality theorists as it pertains to the "why" of behavior. Historical and current developments, including work on biological rhythms, are used to establish a meaningful and contemporary integration of the field. It is a seminar-discussion format course requiring several integrative essays for evaluations. Lab exercises are also integrated into the overall activity of the class. R. Ray

PY 361 Experimental and Statistical Analysis [Q]

An introductory survey of different topical research areas in experimental psychology. It introduces each area's specialized laboratory techniques, methodology and ap-

appropriate (descriptive and/or inferential) statistical analyses. Designed especially for advanced majors, this is a seminar which integrates a continuing laboratory project with the substantive content being discussed. Evaluations include a research project paper, two library research papers, and essay exams. R. Ray

PY 363 Behavior Analysis

Presents the issues and methods of experimental and naturalistic research into behavior dynamics. Beginning with a brief introduction to neurophysiology and the biophysics of movement, a systems analysis of behavior is developed which establishes a foundation for understanding all levels of human behavior, including personality integration. Such a view of personality emphasizes the adaptational dynamics of behavior sequences, sequential integration and behavioral disintegration. Adaptation is analyzed in natural, as well as experimental environments, and the concept of environmentally induced stress is developed. Designed especially for advanced majors; but it is also recommended for Pre-med and Biology majors. ALTERNATE YEARS. R. Ray

PY 365 Physiological Psychology

A laboratory course exploring the physiological basis of behavior. Structure and function of the nervous system are explored in detail. Various models of somatic-autonomic coupling are discussed with emphasis placed upon a systems approach. Students conduct individual research projects in the laboratory. Evaluation is based on test, quality of laboratory work and individual projects. J. Upson

PY 420 Phenomenological Psychology

American and European contributions to phenomenology are discussed with emphasis given to the work on Merleau-Ponty. The relationship of phenomenology to inter-behaviorism is explored. Phenomenology is presented as a scientific methodology which allows for the inclusion of experience as part of the scientific paradigm. A seminar course. Prerequisite: Personality PY 254 or 1 philosophy course. J. Upson

PY 499 Research/Internship/Field Experience

This course is designed to allow the student to pursue a wide variety of independent study projects. Matching student and faculty interest where the appropriate staff member serves as the project sponsor is essential to its success. Student directed and conducted research projects in a variety of settings to include the community, laboratory or library are possible. Internships with local institutions such as the police, courts, hospitals, schools and mental health agencies, and field experience in these situations are also possible. Staff

•RESERVE OFFICER TRAINING CORPS PROGRAM

Rollins College has an agreement with the University of Central Florida which permits Rollins students to enroll in Air Force ROTC courses at UCF and to receive academic credit from Rollins.

The purpose of the program is to provide precommissioning education for qualified students who desire to serve as commissioned officers in the active duty Air Force. The four-year program consists of one course each term (fall, winter, and spring quarters). In the first two years, each course requires two clock hours per week and has a value of one quarter hour. In the junior and senior years, each course meets four clock hours per week and has a value of three quarter hours. Junior students may join the two year program.

The agreement provides: "For students of Rollins College who are accepted into the Air Force ROTC at UCF, Rollins College agrees to grant credit towards graduation on the basis of one (1) Rollins College course for each five (5) quarter hours credit awarded by UCF. For those Rollins College students selected for an AFROTC scholarship, UCF agrees that before each Rollins College registration period, UCF will give a letter of intent to transfer scholarship funds to each qualified student in order for the student to complete his/her registration at Rollins College. Incidental fees, such as application fees, will be borne by the student. Rollins College students not on an AFROTC scholarship will be responsible for all UCF registration and tuition fees at the current rates when enrolling in AFROTC courses."

AFROTC scholarships pay for tuition, fees, textbooks, and provide \$100 per month tax-free allowance. All students not under scholarship receive a \$100 per month tax-free allowance during their junior and senior years.

For additional information, consult the University of Central Florida General Catalog or the Department of Aerospace Studies at UCF.

•SCIENCE

The following courses are taught by faculty members of the Science Division (Departments of Biology, Chemistry, Mathematics and Physics). They do not emphasize one particular scientific discipline; rather they demonstrate the process of science or the application of scientific and mathematical concepts to a wide variety of disciplines.

SC 110 A Discovery Approach to Physical Science [N]

A study of light, motion, energy, and matter emphasizing the process of science and the way in which a small number of fundamental concepts can be combined to account for a wide variety of seemingly complicated phenomena. A primary objective is to impart to the non-science major a sense of the excitement a scientist feels about his/her work by involving the student in the activity of discovery. Background in physical science is not assumed. With laboratory and demonstrations. Staff

ES-SC 120 Energy: A Discovery Approach [N, Q]

A study of energy emphasizing the laws of thermodynamics, and the various forms of energy, with applications dealing with our present energy dilemma. Topics considered will use the discovery approach, which illustrates the process of science in order to understand the way in which a small number of fundamental energy concepts can explain seemingly complex interrelationships between various forms of energy. The course is intended to impart to the non-science major a sense of science as a human activity, and to provide a basic understanding of those scientific principles which are necessary in order to make educated decisions regarding our present energy situation. A background in physical science is not assumed. Three class meetings and one lab or field trip per week. Appropriate for non-science majors. Freshmen or consent. Staff

SC 130 Science and the Senses [N]

This is a course for non-science majors. The subject matter involves two major sense areas: (1) light and seeing; (2) sound and hearing. The material will be covered in the following sequence: the physical properties and behavior of light, the parts and functioning of the eye, and the mind's interpretation of this sense data. Sound and hearing will be covered in a similar sequence. With laboratory. J. Mulson

SC 150 Introduction to Computing [Q]

An introduction to computer solutions of problems in non-science fields. Course topics include a computer language (BASIC), simple logic in writing programs, and the capabilities of computers. Other special topics may be covered. With computer help sessions. Does not count as a lab-science distribution course. Staff

SC 160 Computers in the Sciences [Q]

An introduction to simple and advanced BASIC programming with primary emphasis on the sciences. Statistical tests, computer logic, and computer solutions to problems encountered in physics, chemistry, biology and the behavioral sciences will be included. With computer help sessions. Primarily for science majors. Staff

SC 260 Intermediate Programming with the PASCAL Language [Q]

Survey of computer applications in areas such as file management, gaming, CAI process control, simulation, and modeling. Problem solving will be emphasized with solutions written in the PASCAL Language. Computer projects will be selected from various applications. Offered in alternate years. Prerequisites: SC 150 or 160 or consent. J. Child

SC 350 Assembly Language Programming and Small Computers

Assembly Language concepts and implementation. Relationships among computer components, structures and systems. Emphasis is on PDP/II and 8080A Computers. Features use of a stand alone computer. Offered in alternate years; not offered in 1980-81. Prerequisite: SC 260. J. D. Child

SC 360 Data Structures and File Manipulation [Q]

Data structures, concepts and algorithms used in the solution of non-numerical problems. Applications to data management systems, file organization, information retrieval, list processing, and programming languages. Offered in alternate years. Prerequisite: SC 260. J. Child

•THEATRE ARTS

Brown (Head), Amlund, Juergens, Malick, Neilson

Although this department is proud of the reputation it has earned for sound theatre education and for quality productions, it makes no claim to provide professional training for the performer, technician or designer. It does provide opportunity for a thorough basic training in Theatre Arts within the liberal arts framework. Therefore, a student who majors in Theatre Arts should be able to demonstrate, through performance, proficiency in basic acting, directing, designing, and production skills. To achieve this end, every student takes a specified series of courses in a major field, and participates in major and student-directed productions. At the end of the sophomore year each student is evaluated by the theatre staff to determine whether he/she should continue in the major. In addition all students are expected to become familiar with a comprehensive book list made available when they declare their major. The list covers all production areas, as well as history of the theatre, dramatic criticism, and dramatic literature.

Although some students choose to concentrate in either performance or design and technical theatre, there is an increasing tendency for theatre majors to take a broader spectrum of courses in both areas.

Required of all majors:

Introduction to the Theatre (101)
Acting I (251) or Acting for the Non-Major (TA 102)
Stagecraft (261, 262)
History of Theatre (221, 222)
Theatre Management (351)
Dramatic Criticism and Playwriting (301)
Senior Practicum (401, 402)
At least one term of a Design course, Costume, Scenery or Lighting.

Recommended courses:

At least two terms of theatre workshop (198, 298, 398)
Introduction to the Theatre (102, 103)
Introduction to Studio Methods (A 131)
Art Structure (A 132)
Introduction to Art History (Art 201, 202)
Two terms of: Twentieth Century Drama, British and American (E 264),
Shakespeare (E 317, 318), Twentieth Century Drama, European (E 363).

TA 101 Introduction to Theatre

A survey of theatrical activity in the United States; analysis of the theatre experience, the performers, the audience, dramatic structure, and the environment within which the play takes place. Additional emphasis will be placed on the organization and economic structure of Broadway. Midterm and final; critiques of Annie Russell Theatre plays and reports on assigned plays. Appropriate for non-majors.

TA 102 Introduction to Theatre: Acting for the Non-Major

A basic approach to beginning acting. Course consists mainly of exercises designed to develop the actors' consciousness of their inner life, and their ability to express this life on stage with confidence. No exams, course centers around lab work done in class. Appropriate for non-majors.

TA 103 Introduction to Theatre: Dramatic Literature Through Film

Since play scripts are the blueprints by which we build the theatre experience, this course will examine approximately eight plays and by class discussion will arrive at ideas concerning characterization, theme, plot, style, and idea. Comparison will be made between dramatic literature and performance by studying text and observing the film. Each play will take three class periods. The first class period will be a discussion of the script, the second class period will view the film of the play, and the third class period will be a study of the comparison of the script in performance versus the literature. Midterm and final exam. Attendance at Annie Russell Theatre plays and critiques will be required. Lab fee. Appropriate for non-majors. S. Neilson

TA 197 Theatre in London

A first-hand study of the London theatre scene, in conjunction with Eckerd College. Winter term travel to London with one member of the theatre staff; experiencing at least twelve different productions which may include opera and ballet. Also tours of London drama schools, the BBC and technical institutes, discussions with actors, playwrights, directors and technicians, critiques and seminars of the productions, all culminating in a written "Diary" report. Also, scheduled tours to other points of interest. Extra cost for this course. Appropriate for non-majors.

TA 198, 298, 398 Theatre Practice

The winter term course. Combines classes to serve specialized needs; make-up, elements of production, special styles of acting, voice production, with practical work on the winter term production. Classes meet in the mornings: work and rehearsal periods, afternoons and evenings. Long hours. No exams or papers. Preparation required for classes.

TA 205, 206 Musical Theatre in America

A study of American musical comedy and its European antecedents, using dance and singing (by the class), film strips, films and biographies of major composers as class material. Frequent short tests. Final exam required. Prefer freshmen and sophomores. Two terms recommended: heavier academic emphasis fall term, practicum spring term. TA 205 prerequisite for TA 206. W. Hardy

TA 208 Musical Theatre Practice

Designed for theatre and music majors interested in musical performance, this is both a theoretical and practical study of musical comedy, operetta and opera. Theoretically it attempts to define the stylistic and qualitative differences between these forms; practically it attempts to illustrate, through classroom exercises, the different demands of each. Sight reading, song blocking, fencing, vocal exercises, international phonetic alphabet. Valuable for anyone who has had some vocal and/or performing experience. Frequent short tests. Final. W. Hardy

TA 221, 222 History of the Theatre

A survey course of key periods in the history of the theatre, beginning with the Greeks. Study of theatre architecture, styles of production, and key figures who shaped the course of theatre through the ages. Some examination of dramatic literature in its relationship to evolving production styles. Five hour exams, one paper. Offered alternate years. Open to all students. R. Juergens

TA 251, 252 Acting I

Study of basic acting techniques; script analysis, preliminary work on staging scenes. Exercises in concentration, relaxation, observation; basic stage comportment. Basic exercises in movement for the actor, some fencing. Work is oriented to the presentation of prepared scenes. No exams, written work in the preparation of scenes. Prerequisite: Consent, except for majors. TA 251 prerequisite for TA 252. R. Juergens

TA 261, 262 Stagecraft

An introduction to the techniques and materials used in the construction and decoration of scenery; scene construction, basic scene painting, rigging scenery for shifting. Basic use of power and hand tools. Basic drafting as applied to technical drawings. Weekly quizzes, midterm and final. 3 hours of lecture, 3 hours of lab per week. TA 261 prerequisite for TA 262.

TA 301 Dramatic Criticism and Playwriting

A survey of dramatic criticism beginning with Aristotle. Study of techniques of dramaturgy, preparation of a scenario, exercises in writing dialogue, leading to the composition of a full-length play. Effort is made to present, in the laboratory theatre, scripts deemed worthy of production. One lab period per week devoted to writing. Periodic exams on lecture material. Open to all students. Alternate years. R. Juergens

TA 304, 305 Acting II

Continued work with the actor's emotions with increased emphasis on acting techniques. Advanced work in script analysis; selecting objectives, formulation of a subtext, creating a character. Some stage movement, fencing. Preparation of at least four scenes per term for class presentation. Prerequisite: 252 or consent; 304 or 305.

TA 307, 308 Scene Design

A survey of the classic periods in theatre history and architecture, beginning with the Greeks, geared to the production of stage designs utilizing the styles of these periods. Weekly design projects involving ground plans and color renderings. Lectures of the history of stage design and architecture, employing color slides, film strips, and other illustrative material. Some knowledge of drafting and sketching required. Prerequisite: 262 or consent. TA 307 prerequisite for TA 308. Alternate years. D. Amlund

TA 309, 310 Costume Design

A survey of dress and costume throughout the ages. Application of actual stage costume design. Basic mechanics of costume construction. Weekly design projects. Some experience with sketching and rendering desired. Consent for non-majors. TA 309 prerequisite for TA 310. D. Amlund

TA 351 Theatre Management

A comprehensive course covering all areas of theatre management and production. For all students, no prior knowledge of business necessary. Fundamentals of theatrical producing (the manager, the place for performance, the staff for the theatre); methods of theatrical producing in New York theatre, stock and resident theatre, college and community theatres; business management in the theatre (budgeting, accounting, box office, raising non-ticket revenue); and a study of the theatre and its audience (community and press relations, publicity and advertising and audience engineering and psychology). This course is helpful to all students who wish to gain knowledge of sound business practices in the performing arts. Midterm, final, several projects. Junior major or consent. S. Neilson

TA 363, 364 Stage Lighting

Study of the theory and practice of lighting design and its application to various styles of theatrical production. Study of lighting instruments and their use. Use of color media. Preparation of lighting plots and lighting instrument schedules. Elemental knowledge of electricity and drafting. Prerequisite: major or consent. TA 363 prerequisite for TA 364. Final lighting design project. 3 hours of lecture, 3 hours of lab per week.

TA 399, 499 Independent Study

Independent research in any area of the history of theatre, dramatic criticism, or dramatic literature. Also, laboratory projects in any area of theatre production.

TA 401, 402 Senior Practicum

The senior major course. Practical work on projects designed for presentation in other departments across the campus; readings from plays, prepared cutting from plays, lecture demonstrations. Student is assigned to projects according to his preference in acting, directing, design or technical work. Student may be assigned to direct or design a full-length laboratory theatre production, or may be given design assignments on a major production. 3 class meetings per week, outside preparation required. TA 401 prerequisite for TA 402. Senior major.

OFFICERS AND TRUSTEES

OFFICERS

John M. Tiedtke
Chairman of the Board
J. Walter Tucker, Jr.
Vice Chairman of the Board
Thaddeus Seymour
President

Jesse B. Morgan
Treasurer
Richard T. Trismen
Secretary

TRUSTEES

Thaddeus Seymour
President, ex officio,
Winter Park, Florida

(Terms expire in 1980)

Harold Alfond
Waterville, Maine

Jeanne Bellamy
Coral Gables, Florida

William P. Coliton
Baltimore, Maryland

Leonard K. Firestone
Los Angeles, California

Andrew H. Hines, Jr.
St. Petersburg, Florida

Ira M. Koger
Jacksonville, Florida

William B. Mills
Jacksonville, Florida

J. Walter Tucker, Jr.
Winter Park, Florida

(Terms expire in 1981)

Connie Mack Butler
Tryon, North Carolina

F. Whitner Chase
Windermere, Florida

Betty L. Duda
Oviedo, Florida
Joseph S. Guernsey
Orlando, Florida
Thomas P. Johnson
Pittsburgh, Pennsylvania
John R. McPherson
Orlando, Florida
John M. Tiedtke
Winter Park, Florida
Harold A. Ward III
Winter Park, Florida

(Terms expire in 1982)

John M. Fox
Orlando, Florida
Warren C. Hume
Chappaqua, New York
Marilyn L. Mennello
Winter Park, Florida
Thomas William Miller, Jr.
Winter Park, Florida
Peter B. Sholley
Wellesley Hills, Massachusetts
Patricia W. Swindle
Palm Beach, Florida

TRUSTEES EMERITI

F. Monroe Alleman
Orlando, Florida
Winthrop Bancroft
Ponte Vedra Beach, Florida
W. J. Bowen
Houston, Texas
H. George Carrison
Jacksonville, Florida
Donald A. Cheney
Orlando, Florida
Olcott H. Deming
Washington, D.C.
Frank M. Hubbard
Orlando, Florida

Nelson Marshall
Kingston, Rhode Island
Hugh F. McKean
Winter Park, Florida
Jeannette Genius McKean
Winter Park, Florida
Robert E. McNeill, Jr.
Windermere, Florida
George E. Powell, Jr.
Kansas City, Missouri
Miller Walton
Miami, Florida
Rebecca Coleman Wilson
Winter Park, Florida

OFFICERS OF ADMINISTRATION

Beer, Bettina K.
Registrar
Borsoi, Louise
Title IX Coordinator
Campbell, Roger G.
Director of Housing
Delks, Patricia J.
Director of Libraries
Duvall, Robert F.
Vice President for Development
Gailey, William E.
Comptroller
Gordon, William R.
Director of Alumni Affairs
Griffin, Donald C.
Vice Provost
Grubbs, Cynthia G.
Director of Admissions
Jucker, Edwin L.
Chairman of Physical Education
and Athletics
Lee, Robert E.
Director, Patrick Air Force Branch
Loving, J. William, Jr.
Director of Student Aid
Morgan, Jesse B.
Vice President for Business and Finance
Pease, N. Ronald
Dean of Student Affairs
Peebles, Clifford E.
Director of Purchasing
Ramey, Phyllis H.
Director of Personnel

Reddick, Alzo J.
Director of Minority Affairs,
AA-EO Officer
Riva, Daniel F.
Dean of Continuing Education
Russell, Wanda
Director of Career Service and Placement
Schatz, Martin
Dean of the Crummer School of Finance
and Business Administration
Schriber, Edward E.
Special Assistant to the President
for Financial Affairs
Seymour, Thaddeus
President
Shafe, Marie C.
Acting Dean of the Graduate Program
in Education
Shupe, Annelle
Cashier
Small, Nancy
Director of Health Services
Warden, James A.
Director of Computer Services
Watt, George D.
Director of Campus Safety
Wells, G. Thomas
Director of Physical Plant
Wettstein, A. Arnold
Dean of the Knowles Memorial Chapel
Xenakis, Randall
Director of Public Relations

FACULTY EMERITI

Dates indicate (1) first appointment at Rollins, (2) year of receiving present rank.

Donald Simpson Allen, A.B., A.M.
Professor Emeritus of Theatre Arts,
(1934; 1966)

M. Carol Burnett, B.S., M.Ed., Ed.D.
Professor Emeritus of Psychology,
(1961; 1979)

Angela Campbell, B.A., A.M., Phil.D.
Professor Emeritus of Spanish,
(1936; 1962)

Alphonse Carlo, B.S., M.S.
Professor Emeritus of Violin and Viola,
(1942; 1979)

John Carter, B.M., D.Mus
Professor Emeritus of Music, (1938; 1974)

Theodore Darrah, B.S., S.T.B., L.H.D.
Professor Emeritus of Religion,
(1947; 1979)

Wilbur Dorsett, A.B., M.A.
Professor Emeritus of English,
(1946; 1979)

Paul F. Douglas, A.B., A.M., Ph.D., LL.D.
Professor Emeritus of Political Science,
(1956; 1971)

Evelyn Draper, B.S.
Archivist Emeritus, (1957; 1973)

Geneva Drinkwater, B.A., B.S., M.A., Ph.D.
Professor Emeritus of History,
(1952; 1975)

Margaret Duer, A.B., B.S. in L.S.
Assistant Professor Emeritus, (1968; 1974)

William Thomas Edwards,
B.A.E., M.A.E., Ph.D.
Professor Emeritus of Education,
(1961; 1971)

A. Ross Evans, B.A.E., M.S.B.A., C.P.A.
Professor Emeritus of Business
Administration, (1949; 1975)

Nelson Glass, B.S., M.A.
Professor Emeritus of Education,
(1968; 1979)

Catharine Crozier Gleason,
B.M., M.M., Mus.D.
Associate Professor Emeritus of Organ,
(1955; 1969)

Edwin Phillips Granberry, A.B., Litt. D.
Irving Bachellor Professor Emeritus of
Creative Writing, (1933; 1970)

John Hamilton, A.B., M.A., Ph.D.
Professor Emeritus of English,
(1957; 1979)

Alice McBride Hansen, A.B., B.L.S., Ed.M.
Librarian Emeritus (1951; 1969)

Ada P. Haylor, A.B., M.A.
Associate Professor Emeritus of English,
(1967; 1973)

Sara Harbottle Howden, A.B.
Dean Emeritus of Women (1965; 1975)

Charles Joseph Jorgensen, B.S., Ph.D.
Professor Emeritus of Economics,
(1970; 1975)

Leah Rice Koontz, B.S.
Lecturer Emeritus of English, (1954; 1971)

George Edward Larsen, A.B., M.S.
Director Emeritus of Libraries,
(1968; 1979)

Flora Lindsay Magoun, B.A., A.M.
Associate Professor Emeritus of Business
Education (1935; 1967)

Hugh Ferguson McKean, A.B., M.A.,
L.H.D., D. Space Ed., L.L.D., D.F.A.
Professor Emeritus of Art, and President
Emeritus, (1932; 1975)

Constance Ortmyer, Graduate Royal
Academy of Fine Arts and
Royal Academy Master School
Professor Emeritus of Sculpture,
(1937; 1968)

George Saute, Ph.B., A.M.
Professor Emeritus of Mathematics,
(1943; 1969)

Bernice Catharine Shor, B.S., M.S.
Associate Professor Emeritus of Biology,
(1926; 1968)

Rhea Marsh Smith, A.B., A.M., Ph.D.
Professor Emeritus of History,
(1930; 1972)

Alexander Waite, A.B., M.Ed., Ph.D.
Professor Emeritus of Psychology,
(1937; 1967)

Helen Linnemeier Watson, A.B., M.A.
Dean Emeritus of Women, (1956; 1977)

Richard Schuyler Wolfe, B.A., M.A.
Registrar Emeritus, (1957; 1978)

FACULTY (1979-80)

Dale F. Amlund

Professor of Theatre Arts, (1966; 1978); Designer, Annie Russell Theatre productions; B.F.A., Minneapolis College of Art and Design; M.F.A., Yale Drama School. Theatre consultant and free-lance designer. Teaching areas: scene design, costume design, and stage makeup.

Alexander Anderson

Associate Professor of Music, (1969; 1971); Choirmaster and Organist, The Knowles Memorial Chapel; B. Mus., University of Glasgow; graduate study, Conservatory of St. Cecilia, Rome; Academia Chigiana, Siena, Italy; Fellow of the Royal College of Organists.

Bettina K. Beer

Registrar; (Assistant Professor); (1973; 1978); B.A., St. Lawrence University; M.A., Ph.D., Vanderbilt University. Dr. Beer's academic specialty is modern European history.

Velda Jean Bloodworth

Reference Librarian, (Assistant Professor), (1974; 1978); B.A., Southern Missionary College; M.A.T., Rollins College; M.S., Florida State University.

Erich C. Blossey

Professor of Chemistry, (1965; 1975); B.S., Ohio State University; M.S., Iowa State University; Ph.D., Carnegie Institute of Technology. Dr. Blossey specializes in Bioorganic Chemistry. His other teaching areas include photography.

Peter H. Bonnell

Professor of Russian and German, (1964; 1969); Head, Foreign Language, A.B., University of California at Berkeley; Ph.D., Harvard University. Dr. Bonnell teaches courses in German language, literature and civilization. His publications include two textbooks.

Edward E. Borsoi

Professor of Spanish, (1969; 1978); B.A., University of Bridgeport; M.A., Ph.D., University of Illinois. Teaching areas: Italian, Linguistics, Spanish.

John Jackson Bowers

Professor of Mathematics, (1962; 1971); B.A., Wesleyan University; M.S., Ph.D., Carnegie Institute of Technology. His teaching fields include calculus, algebra, inequalities, differential equations, analysis and applied mathematics.

C. LaRue Boyd

Instructor in Communications, (1970; 1978); B.S., University of Florida; M.S.M., Rollins College. Mr. Boyd teaches courses in Marketing, Advertising Management, Consumer Behavior and Theories of Persuasion.

Thomas Brockman

Professor of Piano, (1962; 1979); Curtis Institute of Music; B.S., Juilliard School of Music; pupil of Olga Samaroff; graduate study in Europe with Edwin Fischer, Nadia Boulanger, and Robert Casadesu. In addition to piano, Mr. Brockman also teaches music history and literature.

Firman H. Brown

Professor of Theatre Arts, (1979; 1979); Director, Annie Russell Theatre; Head, Department of Theatre Arts; B.A., M.A., University of Montana; Ph.D., University of Wisconsin. Dr. Brown has produced and directed an impressive list of plays. His teaching interests include history of the theatre, dramatic literature, acting, directing and introduction to the theatre.

Roger G. Campbell

Assistant Dean of Student Affairs, Director of Housing, Assistant Professor in Education. (1973; 1976); B.S., M.Ed., Memphis State University; Ed.D., Oregon State University. His teaching interests include College student personnel administration, and organizational theory and management.

Barbara H. Carson

Assistant Professor of English (1979; 1979); B.A. Florida State University; M.A., Ph.D., The Johns Hopkins University. Dr. Carson is a specialist in American literature, and her teaching interests include women in American literature, nineteenth- and twentieth-century American literature, and freshman composition.

Robert G. Carson

Associate Professor of Physics (1972; 1976); B.S., The Florida State University; Ph.D., The Johns Hopkins University. Dr. Carson specializes in high energy particle physics and microcomputer applications. His teaching duties include courses in electromagnetic theory, electricity, and computer programming, as well as introductory physics.

James Douglas Child

Associate Professor of Mathematics (1973; 1976); A.B., M.S., San Diego State College; Ph.D., University of Cincinnati. Dr. Child is a specialist in complex analysis and computer aided instruction utilizing graphics; his other teaching fields include operations research.

Douglas A. Coe

Assistant Professor of Chemistry, (1978; 1979); B.S. Montana State University; Ph.D., Oregon State University. Dr. Coe is a physical chemist and he specializes in chemical spectroscopy. His teaching years include general chemistry, physical chemistry, analytical chemistry and science and society.

Howard Boyd Coffie, Jr.

Assistant Professor of Physical Education, (1962; 1967); Assistant Director of Athletics; B.A., M.A.T., Rollins College. Mr. Coffie coaches the Rollins baseball team.

Edward H. Cohen

President of Faculty (1978-1980); Professor of English, (1967; 1979); B.A., University of Maryland; M.A., University of Iowa; Ph.D., University of New Mexico. Dr. Cohen's primary teaching field is Victorian studies.

Persis C. Coleman

Assistant Professor of Biology, (1978; 1978); B.A. University of California, Berkeley; Ph.D., University of California at Davis. Dr. Coleman's specialty is genetics; her teaching includes such areas as general biology, genetics, evolution, and humanistic botany.

Nathan Norman Copeland

Assistant Professor of Physical Education, (1955; 1970); A.B., Rollins College. Mr. Copeland is the Rollins tennis coach.

Deloit E. Cotanche

Professor of Education, (1969; 1979); B.S., Troy State University; M.A., Ed.D., University of Alabama. Dr. Cotanche's fields include educational psychology, guidance and counseling, and aging.

Rosemary K. Curb

Assistant Professor of English, (1979; 1979); B.A., Rosary College; M.A., Ph.D., University of Arkansas. Dr. Curb's primary area of specialization is twentieth-century English and American literature and drama, and her teaching interests include twentieth-century American, English and/or European drama; twentieth-century Black American literature and women's literature.

David M. Currie

Assistant Professor of Economics and Business Administration; (1978; 1979); B.S. University of Florida; M.B.A., Ph.D. University of Southern California. Dr. Currie's areas of specialization are finance and economics, and his teaching areas include corporate finance, principles of economics, and public finance.

Edward F. Danowitz

Professor of Russian, (1971; 1979); B.S. Holy Cross College; M.S., The George Washington University; M.A., Ph.D., University of Pennsylvania. Dr. Danowitz offers courses in Russian language, literature and area studies. He has also developed a computerized systems approach to teach Russian syntax and grammar.

Frank A. Dasse

Assistant Professor of Economics, (1976; 1976); B.S.E.E., University of Michigan; M.B.A., Stetson University; Ph.D., University of Florida. Dr. Dasse teaches economics and management, specializing in marketing and price analysis relation to agricultural and natural resource commodities.

Patricia J. Delks

Director of Libraries, Associate Professor; (1979; 1979); B.A., Indiana University; graduate work in Anthropology, University of Kentucky; M.L.S., Western Reserve University. Ms. Delks' areas of interest include library science and anthropology.

Daniel R. DeNicola

Associate Professor of Philosophy (1969; 1976); A.B., Ohio University; M.Ed. and Ed.D., Harvard University. Research and teaching areas: Ethics, Bioethics, Philosophy of Education, Ancient Philosophy, Evaluation and Grading, History of Philosophy.

Josephine P. Dickson

Librarian, The Roy E. Crummer School of Finance and Business Administration, (Assistant Professor), (1973; 1977); A.B., Salem College; M.S., Florida State University.

Hoyt Littleton Edge

Associate Professor of Philosophy, (1970; 1975); Coordinator, Holt House Program; B.A., Stetson University; M.A., Ph.D., Vanderbilt University. Dr. Edge's areas of specialization are the philosophies of the mind and parapsychology. The other courses he teaches include American philosophy and social and political philosophy.

Charles Milton Edmondson

Associate Professor of History, (1970; 1974); Head, Department of History; B.A., M.A., University of Mississippi; Ph.D., The Florida State University. Dr. Edmondson's field is the history of Russia and the Soviet Union. In addition, he teaches courses in modern European history and Chinese history.

Martin E. Farkash

Associate Professor of Psychology, (1979; 1979); B.A., Brooklyn College; Ph.D., Yeshiva University. Dr. Farkash's teaching areas include developmental psychology and clinical psychology. He has published studies in "Self-programming and Theta States," and "Biofeedback and Self-Regulation."

Fred Ford

Associate Professor of Business Administration, Patrick Air Force Base Branch, (1967; 1974); B.S., Wharton School, University of Pennsylvania; M.B.A., Temple University. Professor Ford teaches courses in basic economics, marketing and personnel.

William K. Gallo

Associate Professor of Music, (1967; 1972); B.S., University of Illinois; M.A., Ph.D., The Catholic University of America. Dr. Gallo teaches courses in music history, folksongs, musicology and 20th century American popular music.

Norman T. Gilbert

Associate Professor of Political Science, (1971; 1975); B.A., San Fernando Valley State College; M.A., University of California at Berkeley; Ph.D., Northern Illinois University. Dr. Gilbert teaches American politics, including courses in political parties, state and local government, public administration, and the politics of environmental control.

Emory Giles

Associate Professor of Education, (1978; 1978); B.S., University of Wisconsin; M.S., Illinois Wesleyan University; Ph.D., University of Minnesota. Dr. Giles' area of specialization is educational administration, and he teaches courses at the graduate level in educational administration and supervision and at the undergraduate level in science methods.

Eileen Gregory

Associate Professor of Biology, (1979; 1979); B.S., Michigan State University; Ph.D., University of Washington. Dr. Gregory teaches general biology, nutrition, microbiology and biochemistry. Her research interests include biochemistry, molecular biology, genetics and medical microbiology.

Donald Christian Griffin

Vice Provost, Associate Professor of Physics, (1970; 1974); B.S. Rollins College; M.S., Ph.D., Purdue University. In addition to his administrative duties, Dr. Griffin teaches courses in optics, atomic physics, quantum mechanics, physical science, and computer programming.

Cynthia G. Grubbs

Director of Admissions, (1978; 1978); B.A., M.Ed., Rollins College.

Wayne D. Hales

Associate Professor of Economics, (1971; 1976); B.A., Oklahoma City University; M.S.,

Ph.D., Oklahoma State University. Dr. Hales' teaching fields include public finance and monetary theory.

Hallie Lu Hallam

Associate Professor of Art History, (1966; 1975); B.A., West Virginia Wesleyan College; M.A., The Florida State University. Professor Hallam teaches a variety of courses in art history ranging from the arts of ancient civilizations to 20th century art.

Thomas Devaney Harblin

Associate Professor of Sociology, (1972; 1975); B.A., Le Moyne College; M.S., Ph.D., Cornell University. Dr. Harblin offers courses in marriage and family, social stratification, human sexuality, population, medicine and health care, environmental planning, environmental studies and social change and the future.

William B. Hardy

Adjunct Instructor of Theatre Arts, (1973; 1973); B.A., B.Mus., Rollins College. Mr. Hardy acts as a consultant to the musical productions in the Annie Russell Theatre and teaches history of American musical theatre and musical theatre practice.

Edward J. Harrell

Associate Professor of History and Political Science, Patrick Air Force Base Branch (1972; 1975); B.A., M.A., Ph.D., The Florida State University. Dr. Harrell teaches courses in European history.

Paul Harris

Assistant Professor of Physical Education, (1978; 1979); B.A., M.A.T., Rollins College. Mr. Harris is the waterfront director and waterski coach for Rollins College and he teaches basic sailing and canoeing courses.

Herbert Elmore Hellwege

Professor of Chemistry (1954; 1963); Acting Head, Department of Chemistry; Chairman, Pre-Medicine Committee; Ph.D., University of Hamburg. Dr. Hellwege's research and teaching fields are physical, inorganic and analytical chemistry.

William J. Hepburn

Assistant Professor of Business Administration, (1978; 1978); B.S., Rutgers University; M.B.S., Rollins College. Mr. Hepburn's research and teaching interests are in the areas of management, marketing research and quantitative methods.

Donald W. Hill

Professor of Economics, (1958; 1966); Wilkes College; B.S., Bucknell University; M.S., Cornell University; Ph.D., The American University. Dr. Hill specializes in microeconomic theory, managerial economics, and human behavior in organizations.

Gordon E. Howell

Associate Professor of Physical Education, (1967; 1976); B.S., Western Carolina College; M.A.T., Rollins College, Ed.D., Highland University. Dr. Howell is the soccer coach and the director of men's intramurals.

Peggy Ann Jarnigan

Assistant Professor of Physical Education, (1967; 1971); B.S., Carson-Newman College; M.S., University of Tennessee. Ms. Jarnigan coaches volleyball.

Arthur R. Jones, Jr.

Professor of Sociology, (1969; 1975); B.A., Baylor University; M.A., Ph.D., Louisiana State University. Dr. Jones primarily teaches sociology courses in the areas of deviant and criminal behavior and on legal and educational institutions.

Edwin L. Jucker

Raymond W. Greene Professor of Health and Physical Education (1972; 1972); Chairman of Physical Education and Athletics and Director of Physical Education; B.A., University of Cincinnati; M.A., Columbia University.

Robert O. Juergens

Professor of Theatre Arts, (1963; 1972); B.A. Heidelberg College; M.A., Ohio State University; M.F.A., Yale School of Drama; D.F.A., Yale University. Dr. Juergens has directed approximately 75 productions, and appears regularly in local professional theatre productions and films.

Joseph Justice

Associate Professor of Physical Education, (1946; 1957); Director of Athletics; A.B., Rollins College. Mr. Justice coaches the men's and women's golf programs.

Michael S. Kahn

Associate Professor of Education, (1973; 1976); Director of Student Teaching; B.S., M.Ed., Ph.D., University of Pittsburgh. Dr. Kahn's teaching fields include special education, reading and language arts, and educational psychology.

Arthur M. Kenison

Associate Professor of Economics (1973; 1978); B.A., Saint Anselm's College; M.B.A., Columbia University; M.A., University of New Hampshire; Ph.D., Boston University. Dr. Kenison's teaching includes courses in finance, statistics and economic theory.

Thomas D. Lairson

Assistant Professor of Political Science (1976; 1980); B.S., M.A., Ph.D. University of Kentucky. Dr. Lairson teaches courses in comparative foreign policy, world politics and international economics, American foreign policy and American political culture. His research interests are in the area of foreign policy decision-making.

Patricia Anne Lancaster

Vice President of the Faculty (1978-80); Associate Professor of French, (1970; 1975); B.A., Coker College; M.A., Ph.D., Emory University. Dr. Lancaster teaches French language, literature and culture. Her specialty is twentieth-century French Avant-Garde theatre.

Jack C. Lane

Alexander W. Weddell Professor of History of the Americas, (1963; 1977); B.A., Oglethorpe University; M.A., Emory University; Ph.D., University of Georgia. Dr. Lane is an historian of modern American history, who specializes in its military and diplomatic aspects. In addition to courses in these fields, he also teaches constitution and educational history.

Ronald B. Larned

Assistant Professor of Art, (1969; 1972); Head, Department of Art; B.A. Texas Technical College; M.A., New Mexico State University. Professor Larned specializes in design, sculpture, and jewelry design. He also teaches courses in photography and drawing.

Carol Lauer

Assistant Professor of Anthropology (1977; 1978); B.A., Brandeis University; M.A., Ph.D., University of Michigan. Dr. Lauer is a Primatologist who has observed and published studies on the Rhesus monkeys.

Robert E. Lee

Associate Professor of Education, Patrick Air Force Base Branch (1972; 1974); Director, Patrick Air Force Base Branch of Rollins College; B.S., Florida Southern College; M.A., Western Carolina University; Ph.D., The Florida State University. Dr. Lee teaches Contemporary Issues in Education and Elementary Curriculum.

Robert S. Lemon, Jr.

Assistant Professor of Art, (1973; 1977); B.A., University of Missouri at Kansas City; M.A., Ph.D., Ohio University. Dr. Lemon's teaching fields include art history and comparative arts.

Robert Barry Levis

Professor of History, (1968; 1978); B.S., M.A., Ph.D., Pennsylvania State University. Dr. Levis' field is 17th and 18th-century English history. He also teaches courses in ancient, medieval and early modern European history.

Thomas U. Lineham, Jr.

Head Catalog Librarian (Associate Professor), (1973; 1978); A.B., Bowdoin College; M.S. in L.S., The Catholic University of America.

Mary Virginia Mack

Assistant Professor of Physical Education, (1962; 1967); B.S., University of Missouri; M.P.H., University of Florida. Ms. Mack coaches the women's tennis and basketball teams and is Director of Women's Intramurals. She also serves as an adjunct professor in the Education Department.

Keith I. Malick

Technical Director of the Annie Russell Theatre and Instructor of Theatre, (1979; 1979); B.A., Otterbein College; M.A., Pennsylvania State University. In addition to Mr. Malick's technical work with the Annie Russell Theatre, he teaches courses in technical theatre for the Theatre Department.

Nancy M. McAleer

Associate Professor of Education (1972; 1977); B.S., Northern Illinois University; M.Ed., Louisiana State University in New Orleans; Ed.D., University of Florida. Dr. McAleer's teaching areas include elementary education, children's literature, language arts and reading.

John W. McCall

Assistant Professor of Business Administration (1976; 1979); B.S.B.A., University of Florida; M.B.A., Nova University; Certified Public Accountant. Mr. McCall teaches courses in accounting.

James E. McCarthy

Associate Professor of Education (1973; 1976); A.B., Sacred Heart Seminary; M.A., University of Michigan; Ed.D., Indiana University. Dr. McCarthy specializes in the fields of Counseling and Guidance.

Carolyn Bouland McFarland

Head Reference Librarian, (Associate Professor), (1970; 1978); B.A., The University of South Florida; M.S., The Florida State University.

Harry J. Meisel

Assistant Professor of Physical Education, (1963; 1966); B.S., Stetson University; M.A., Columbia University; Aquatic Director.

Elinor Smith Miller

Professor of French, (1968; 1973); A.B., Wesleyan College; M.S., Ph.D., University of Chicago. Dr. Miller specializes in sixteenth-century French language and literature. Her research interests include Black Franco-phone literature and the French nouveau roman.

Harry H. Morall

Assistant Dean of Education; Associate Professor of Education, (1976; 1976); Dr. Morall specializes in education administration and supervision.

Joseph F. Mulson

Professor of Physics, (1962; 1973); B.S., Rollins College; M.S., Ph.D., Pennsylvania State University. Dr. Mulson's teaching fields are analytical mechanics, electronics, and introductory computing. His research interests lie in holography and laser application.

Ralph Howard Naleway

Associate Professor of Mathematics, (1968; 1973); B.S.E., University of Florida; M.A.L.S., Wesleyan University. Mr. Naleway's fields include applied mathematics, teacher education, geometry and linear programming.

Steven S. Neilson

Business and Promotion Manager, Rollins College, Theatre Arts Department; Associate Professor of Theatre Arts, (1973; 1979); Faculty Chairman of Freshman Studies, B.A., University of Delaware; M.A., University of Miami. Mr. Neilson's primary teaching areas are theatre and performing arts management, introduction to theatre and dramatic literature through film.

E. Alan Nordstrom, Jr.

Associate Professor of English, (1970; 1976); A.B., Yale University; M.A., Ph.D., University of Michigan. Dr. Nordstrom's field is the English Renaissance, in particular Shakespeare. His other courses include Literary Criticism.

Maurice J. O'Sullivan, Jr.

Associate Professor of English, (1975; 1975); B.A., Fairfield University; M.A., Ph.D., Case Western Reserve University. Dr. O'Sullivan specializes in eighteenth-century English literature and minority literature, in particular that of Afro-Americans.

Philip E. Pastore

Associate Professor of English, (1969; 1973); B.A., M.A., University of Connecticut; Ph.D., University of Florida. Dr. Pastore's courses include: 19th & 20th century American Literature, Southern Writers, Poetry of World War I, Contemporary American novels, and the American short story.

N. Ronald Pease

Dean of Student Affairs; Associate Professor of Education, (1970; 1970); A.B., Gettysburg College; M.A., Colgate University. In addition to his administrative responsibilities, Dean Pease teaches courses in the Graduate Program in Education within the general area of guidance and counseling.

Pedro A. Pequeno

Associate Professor of Anthropology, (1972; 1976); Head, Department of Anthropology and Sociology; B.A., M.A., Wichita State University; Ph.D., Southern Illinois University. Dr. Pequeno specializes in cultural and applied anthropology and ethnohistory with particular reference to Latin America, the Caribbean and ethnic minorities in the U.S.

Nicholas Tate Perkins

Associate Professor of Mathematics and Science; Patrick Air Force Base Branch, (1964; 1973); B.S., United States Military Academy at West Point; M.S., Trinity University. Mr. Perkins teaches mathematics and physics.

Karl E. Peters

Associate Professor of Religion, (1973; 1973); B.A., Carroll College; B.D., McCormick Seminary; Ph.D., Columbia University. Dr. Peter's primary teaching areas are contemporary religious thought and process philosophy. His other fields include courses which explore the relationships between religion and science, and between technology, human values and the environment. He is editor of *Zygon: Journal of Religion and Science*

Thomas Fales Peterson

Professor of Art, (1958; 1975); B.F.A., University of Georgia; M.F.A. Columbia University. A distinguished painter, whose works have been exhibited nationally, Mr. Peterson's courses include painting, printmaking, drawing and color theory.

Walter Stephen Phelan

Associate Professor of English, (1971; 1976); B.A., Pontifical College Josephinum; M.A., Ph.D., Ohio State University. Dr. Phelan specializes in middle English literature. In addition to that field, his other teaching areas include ancient and Renaissance literature, semantics and the history of language.

Lynne Miller Phillips

Librarian, The Archibald Granville Bush Science Center, (Associate Professor), (1970; 1978); B.A., University of Arizona; M.L.S., Texas Women's University.

Carolyn R. Planck

Instructor in Speech and Communication, (1976; 1976); Head, Department of Speech and Communications; B.A., M.A., Purdue University. Ms. Planck's courses include: Public Speaking, Interpersonal Communication, Persuasion and Small Group Communication.

Roger D. Ray

Professor of Psychology, (1969; 1978); Head, Department of Psychology; B.A., Rollins College; Ph.D., University of Tennessee. Dr. Ray's field is experimental psychology. His teaching areas include courses in learning, motivation, experimental-statistical analysis, and psychosomatic pathology.

Alzo Jackson Reddick

Director of Minority Affairs; Assistant Professor of History (1971; 1977); B.S., Paul Quinn College; M.Ed., Florida A & M University; Ed.D., Nova. Mr. Reddick teaches courses in Afro-American history and education.

Kathleen J. Reich

Acquisitions Librarian (Associate Professor), (1971; 1977); Diploma, Deutsche Buchhandler Lehranstalt; Diploma, Antiquarian; Zwischenprüfung, Leibniz Universität, Leipzig; graduate study, Universität Mainz; M.A.T., Rollins College. Ms. Reich's research interests include Walt Whitman, West African literature, research methodology, and she teaches introduction to research methods within the Graduate Program in Education.

David Irving Richard

Professor of Biology, (1968; 1977); B.A., Capital University; M.S., Ph.D., Ohio State University. Dr. Richard's teaching areas include zoology, ecology, sociobiology, marine biology, tropical biology and parasitology.

Robert W. Ridgway

Associate Professor of Chemistry, (1972; 1975); on professional leave of absence 1979-80; Head, Department of Chemistry; B.S., Drexel University; Ph.D., University of New Hampshire. Dr. Ridgway's field is physical organic chemistry. He has also done research on the application of computers in science education.

Daniel F. Riva

Professor of Political Science, (1969; 1976); Dean of Continuing Education; Director, Rollins College School of Continuing Education; Director, School of Creative Arts; Director, Criminal Justice Programs; B.S., Springfield College; M.A., The George Washington

University; Ph.D., University of Missouri. Dr. Riva teaches courses in criminal justice, research and the social sciences.

Charles A. Rodgers

Professor of Speech Communications, (1969; 1978); Director WPRK-FM; B.A., M.A., Ph.D., Ohio State University. Dr. Rodgers teaches courses on public address, television and radio production.

John Ross Rosazza

Professor of Voice, (1950; 1974); Head, Department of Music, B.M., Westminster Choir College; M.A.T., Rollins College; graduate study, Conservatoire American, Fontainebleau; Conservatoire National de Musique Paris; pupil of John F. Williamson, Martial Singher, Charles Panzera, Nadia Boulanger. In addition to courses in voice, he also teaches courses in vocal repertoire and opera.

John Stoner Ross

Archibald Granville Bush Professor of Science, (1953; 1977); Secretary of the Faculty (1978-80); Head, Department of Physics; Coordinator, Engineering Program, A.B., DePauw University; M.S., Ph.D., University of Wisconsin. Dr. Ross specializes in atomic spectroscopy. His teaching duties include courses in astronomy and atomic physics.

Raymond E. Roth

Archibald Granville Bush Professor of Mathematics, (1968; 1968); B.S., M.S., St. Bonaventure University, Ph.D., University of Rochester. Dr. Roth's major teaching area is probability and statistics, especially model making, forecasting, and operations analysis.

Timothy J. Russell

Visiting Assistant Professor of Education (1979; 1979); B.S., St. Vincent College; Ph.D., University of Florida. Dr. Russell's area of specialization is marriage and family counseling.

Wanda J. Russell

Director of Career Service and Placement (1972; 1975); Instructor in Education; B.A. Bowling Green State University; M.Ed. Rollins College.

Carl J. Sandstrom

Adjunct Professor of Biology, (1962; 1971); B.S., Ph.D., University of Chicago. Dr. Sandstrom's courses include Comparative Vertebrate Anatomy and Vertebrate Embryology.

Martin Schatz

Dean of the Roy E. Crummer School of Finance and Business Administration; Professor of Business Administration, (1979; 1979); B.S., University of Alabama; M.B.A., University of Florida; Ph.D., New York University. In addition to his administrative duties, Dr. Schatz' research interests are in management and organizational behavior.

Edward W. Scheer

Associate Professor of Biology, (1957; 1972); B.S., Rollins College; M.A., Harvard University. Professor Scheer's teaching areas include botany, geology and environmental studies. He is particularly interested in developing curriculum and testing methods for environmental studies programs.

Robert J. Schirmacher

Assistant Professor of Education, (1979; 1979); B.A., Michigan State University; Ph.D., University of Illinois. Dr. Schirmacher's teaching and research interests are in the general area of early childhood education.

Frank Sedwick

Professor of Spanish, (1963; 1963); Coordinator of Overseas Study; B.A., Duke University; M.A., Stanford University; Ph.D., University of Southern California. In addition to courses in Spanish literature and language, Dr. Sedwick also teaches Italian language and is the author of two literary books and numerous textbooks.

Cary Douglas Ser

Associate Professor of English, (1965; 1975); Head, Department of English; B.A., M.A., Ph.D., University of Florida. Dr. Ser's teaching areas include the English novel, film, Victorian studies, science fiction, and business communications.

Thaddeus Seymour

President, Professor of English, (1978; 1978); B.A., University of California at Berkeley; M.A., Ph.D., University of North Carolina at Chapel Hill. In addition to his special in-

terest in Eighteenth Century English Literature, Dr. Seymour also enjoys teaching freshman composition.

Marie C. Shafe

Assistant Professor of Education, (1978; 1978); Acting Dean of the Graduate Program in Education; B.A., M.Ed., West Georgia College; Ed.D., Indiana University. Dr. Shafe's areas of specialization are guidance and human relations counseling, and she teaches courses in counseling and guidance, psychology, and human relations.

Alexandra S. Skidmore

Professor of Mathematics (1965; 1976); Head, Department of Mathematics; A.B., Ph.D., Western Reserve University. Dr. Skidmore's teaching duties include courses in analysis and algebraic structures. Her major research interests are in the area of ordinary differential equations.

James W. Small, Jr.

Associate Professor of Biology, (1972; 1976); Head, Department of Biology. B.S., University of North Carolina; M.S., Ph.D., University of Kentucky. Dr. Small specializes in systems ecology and ichthyology. The courses he teaches include Physiology, Histology and Environmental Modeling.

Bess W. Stadt

Professor of Spanish (1966; 1975); B.A., M.A., University of Rochester; Ph.D., University of Arizona. Dr. Stadt's field of concentration is nineteenth century Spanish literature. She is particularly interested in women novelists of Spain during that century.

Marilyn C. Stewart

Assistant Professor of Anthropology, (1975; 1975); B.A., Harper College; M.A., Ph.D., State University of New York at Binghamton. Dr. Stewart specializes in the archaeology of North America, and also teaches courses in cultural anthropology. She has conducted archaeological excavations at both the Palmer-Taylor and Alderman sites, about 20 miles from the College in Florida.

Kenna C. Taylor

Assistant Professor of Economics, (1973; 1979); B.A., M.A., Ohio State University; Ph.D., University of Florida. Dr. Taylor's areas of interest are economic development, public finance, and economic theory, and he teaches courses in economics, statistics, quantitative methods, and environmental studies.

James D. Upson

Professor of Psychology, (1969; 1975); B.A., University of Florida; M.A., University of Iowa; Ph.D., Duquesne University. Dr. Upson's research interest is the phenomenological and biopsychological dimensions of stress. His teaching areas are personality, phenomenological and physiological psychology.

Luis Valdes

Associate Professor of Political Science, (1970; 1970); Head, Department of Political Science; B.A., M.A., Ph.D., University of Wisconsin. Dr. Valdes specializes in comparative politics, especially that of Latin America. His other teaching areas include Third World politics, International law, and major contemporary issues.

Julian W. Vincze

Associate Professor of Business Administration, (1977; 1977); B.S., University of Montana; M.B.A., University of Western Ontario; Ph.D., University of Bradford. Dr. Vincze's area of specialization is marketing and Business Management and he teaches courses at both the undergraduate and graduate level in marketing and management.

Edward E. Wahlkamp

Associate Professor of Economics and Business Administration, Patrick Air Force Base Branch, (1968; 1971); B.S., M.S., University of Kentucky. Professor Walkamp's special field is investments.

James A. Warden

Director of Computer Services and Associate Professor of Physics, (1979; 1979); B.S., Southwestern at Memphis; M.S., Ph.D., University of South Carolina. Dr. Warden's research interests are in computer science and microprocessors, and he teaches courses in computer science.

Bruce B. Wavell

William R. Keenan Professor of Philosophy, (1959; 1977); Head, Department of Philosophy and Religion; Director, Honors Degree Program; B.Sc., Ph.D., University of London. Dr. Wavell specializes in the philosophy of language and also teaches courses in logic, and the philosophies of law and science.

John Philip Weiss

Professor of Sociology, (1970; 1979); B.A., Bowdoin College; M.A., Ph.D., Yale University. Dr. Weiss specializes in social problems, the family and the sociology of education. He is currently interested in the social problems related to the stratification process in American society.

Bill H. West

Assistant Professor of Business Administration, (1978; 1978); B.S., M.C.S., Rollins College; M.P.A., Georgia State University; Certified Public Accountant. Mr. West's areas of expertise include financial, theory and tax accounting, and he teaches accounting courses at the undergraduate and graduate levels.

Jean West

Associate Professor of English, (1972; 1976); M.F.A., Cornell University. Ms. West's teaching fields include creative writing, modern poetry, women's studies and children's literature. She has published a collection of her poetry, *Holding the Chariot*.

A. Arnold Wettstein

Professor of Religion, (1968; 1977); Dean, The Knowles Memorial Chapel; B.A., Princeton University; B.D., Union Theological Seminary; Ph.D., McGill University. Dr. Wettstein's fields are contemporary religious thought and world religions. He is particularly interested in theological analysis of contemporary problems emerging from the technological domination of American culture. Dr. Wettstein teaches courses in contemporary religious thought, world religions, and Chinese thought and culture.

Gary L. Williams

Associate Professor of History, (1972; 1976); A.B., Centre College; M.A., Ph.D., Duke University. Dr. Williams specializes in nineteenth century United States history, especially racial attitudes, the slave experience and the Civil War era.

Frank Wilson Wolf

Associate Professor of Education, Director of Student Teaching, Patrick Air Force Base Branch, (1970; 1975); B.S., Florida Southern College; M.Ed., Ed.D., University of Florida.

Ward Woodbury

Professor of Music, (1966; 1974); Director of Music Activities; B.A., Western State College of Colorado; M.A., Ph.D., University of Rochester, Eastman School of Music. Dr. Woodbury is music director and conductor of the Bach Festival Society of Winter Park. He teaches courses in music theory, history, and appreciation.

ACADEMIC CALENDAR

1979-80				1980-81			
Tue.	Sept.	4	New Students Report to Campus	Tues.	Sept.	2	
Sat.	Sept.	8	Registration	Sat.	Sept.	6	
Mon.	Sept.	10	Fall Term Classes Begin	Mon.	Sept.	8	
Mon.	Oct.	8	Early Registration for Off-Campus Group Studies	Mon.	Oct.	6	
Fri.	Oct.	19	MID-TERM	Fri.	Oct.	17	
Wed.	Oct.	24	Winter & Spring Pre-Registration Opens	Wed.	Oct.	22	
Fri.	Nov.	2	Pre-Registration Closes	Fri.	Oct.	31	
Thurs.	Nov.	22	Thanksgiving Recess Begins	Thurs.	Nov.	27	
Mon.	Nov.	26	Classes Resume	Mon.	Dec.	1	
Sat.	Dec.	1	Winter and Spring Registration	Sat.	Nov.	29	
Fri.	Dec.	7	Last Day of Classes Fall Term	Fri.	Dec.	5	
Mon.	Dec.	10	Fall Term Examinations Begin	Mon.	Dec.	8	
Thurs.	Dec.	13	Fall Term Ends	Thurs.	Dec.	11	
Mon.	Jan.	7	Winter Term Begins	Mon.	Jan.	5	
Wed.	Feb.	6	Winter Term Ends	Wed.	Feb.	4	
Mon.	Feb.	11	Spring Term Classes Begin	Mon.	Feb.	9	
Fri.	Mar.	21	MID-TERM	Fri.	Mar.	20	
Sat.	Apr.	5	Spring Term Recess Begins	Sat.	Apr.	4	
Mon.	Apr.	14	Spring Term Classes Resume	Mon.	Apr.	13	
Mon.	Apr.	21	Fall Term Pre-Registration Begins	Mon.	Apr.	20	
Wed.	Apr.	30	Pre-Registration Closes	Wed.	Apr.	29	
Wed.	May	14	Last Day of Classes-Spring Term	Wed.	May	13	
Fri.	May	16	Spring Term Examinations	Fri.	May	15	
Sat.	May	17	Spring Term Examinations	Sat.	May	16	
Mon.	May	19	Spring Term Examinations	Mon.	May	18	
Tues.	May	20	Spring Term Examinations	Tues.	May	19	
Sat.	May	24	Commencement for Evening Programs	Sat.	May	23	
Sun.	May	25	Commencement for Liberal Arts College and Crummer	Sun.	May	24	

This catalog supersedes all previous issues. The College reserves the right at any time to make whatever changes may be found necessary.

Rollins College prohibits and rejects any discrimination based on race, sex, color, creed, national origin, religion or handicap of individuals in the selection and admission of students. Applicants can be fully assured of admission solely on the basis of their academic achievements and qualifications.

Further, the practice of discrimination on the basis of race, sex, color, creed, national origin, religion or handicap of individuals is prohibited in all programs and activities at Rollins College.

Winter Park, Florida

32789

Non Profit
Organization
Postage Paid
Permit #66
Winter Park
FL